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Formerly Lecturer on Nervous Diseases in the University of the City of New York; Fellow of the New York Academy of Medicine; Author of "Our Home Physician," "Hay Fever;" one of the Authors of "Medical and Surgical Electricity," etc.

[POSTHUMOUS MANUSCRIPT.]

EDITED BY A. D. ROCKWELL, A.M., M.D.

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The philosophy of this work is based on the theory that there is a special and very important and very frequent clinical variety of neurasthenia (nervous exhaustion) to which the term sexual neurasthenia (**sexual exhaustion**) may properly be applied.

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The Richmond Southern Clinic says :—No one but a person intimately acquainted with the immediate and remote effects of nervous exhaustion and general irritability of the nervous system from sexual disturbances could have produced such a work as the one before us. The book from beginning to end is one vast collection of fact and theory, the result of labor and observation on the part of the late though distinguished author. This field of practice promises the most brilliant results, not only for the sake of personal interest on the part of the practitioner; but for the benefit that may accrue to the large class of unfortunates, who, in inexperienced hands, would go from bad to worse.

The California Medical Journal says :—We have perused this work of Dr Beard's with much interest, and, we believe, profit. As a scientific work we regard it in the most favorable light. The language is chaste, but unmistakably to the point. The deductions drawn are in accord with the truths of anatomical and physiological science, and many points which have puzzled thinking physicians heretofore are explained and simplified.

The New Orleans Medical and Surgical Journal says:—Perhaps no one has done more to popularize the study of affections of the nervous system than the late Dr. Geo. M. Beard, and the present work is a fitting companion to those which have already emanated from his pen, and is concordant with the most advanced thought upon this subject. Many of the diseases which are placed under general debility, hypochondriases and hysteria, are found to fall under the comprehension of Sexual Neurasthenia, and a careful study of the matter contained in the work cannot fail to make one more successful in the management of what are often obscure troubles, of which the treatment is very unsatisfactory to both physician and patient. We recommend the work as deserving perusal by all who are interested in the study of the particular department under consideration.

The Detroit Therapeutic Gazette says:—Anything and everything relating to the sexual apparatus and its diseases command attention. The immediate physical effects which ensue on a derangement, or a fancied derangement, of these organs, are at the root of a large congeries of distinct and indistinct, real and imaginary ailments. The work which shall succeed in discovering the real nature of actual disease and in exposing the folly of brooding on fancied disease associated with the organs of procreation will be a boon, especially to young men, although young women, and even older people of both sexes, might frequently profit by such a work. It is an interesting book to read. Much good can be learned from it, and we recommend every intelligent physician to read it.

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The Memphis, Tenn., Miss. Valley Medical Monthly says:—The author of this work applies the term sexual neurasthenia to that class of conditions which have become fearfully common, if we are to judge from clinical experience, coupled with the immense number of advertisements in the secular press, emanating from the charlatan, and claiming the attention of suffering parties. The work is an original one in every particular, and well worthy a place in the study of every physician.

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The Microscope of Ann Arbor, Mich., says:—Dr. Beard was one of the keenest of observers, and anything that ever came from his pen could be read by all physicians with profit. He paid a great deal of attention to the subject of nervous exhaustion, and was well prepared to present such a work as this. It treats of a subject but little understood by the general practitioner. The work will be appreciated by those physicians who are alive to the times.

The Canadian Practitioner of Toronto says:—It deals with that form of Neurasthenia (exhaustion) associated with the abuse and irritation of the sexual apparatus. It is a philosophical and clinical study upon a large number of cases, which are narrated in the forcible and lucid style of the author. The book will repay perusal for its many hints in diagnosis and treatment.

The Iowa State Medical Reporter, Des Moines, says:—In treatment the work abounds in a number and variety of measures, which do not partake of the character of a hobby, and the volume commends itself as instructive and thoughtful to all who desire to enlarge their thought and knowledge on any of the varieties of neurasthenia.

The National Druggist, St. Louis, says:—This form of nervous exhaustion Dr. Beard calls sexual neurasthenia. It is of its phenomena in the male that the present volume treats more especially, though its exhibition in the female (in the shape of ovarian and womb troubles) are touched upon. Spermatorrhea, irritable prostate, impotence, etc., hitherto regarded and described as separate diseases, here are held to be but so many symptoms of one disease —neurasthenia.

While the work was manifestly written for the use of physicians, and more especially directed to the medical profession, like everything coming from the prolific pen of the lamented author, it is couched in language so plain and free from technicalities that it may be read with profit (if not pleasure) by any thinking man. We regret, for the sake of the multitude of our countrymen, whom a perusal of the volume might save from years of agony, that the same principle had not been followed in choosing a title. To the great mass of men who might be benefited by reading the book (and who would read it if they only knew its character), the title "Neurasthenia" not only conveys no meaning, but by its appearance of erudition frightens them off. Of what inestimable benefit it might be to the thousands of "sufferers from early indiscretion," who are daily and nightly undergoing mental tortures, compared to which the keenest physical agony would be pleasure. To these men the only literature bearing upon their condition which is accessible is of the vilest description, calculated not to allay their fears and lead them aright, but to frighten them into the dens of quackery and thieves.

The New York Phrenological Journal says:—In the discussion of neurological topics Dr. Beard was a leader, and probably contributed more than any other man connected with the practice of medicine in America to the disclosure of the causes of nervous debility and to the analysis of its different phases.

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The Denver Medical Times says:—Dr. Beard is to be commended for the good he has been instrumental in accomplishing in directing attention to this important subject. The generative function plays a very important part in our economy; and this reflex phenomena has attracted considerable attention of late and deserves all the light which modern science can throw upon it. Dr. Beard has given us a volume from which every conscientious practitioner can derive food for consideration and application.

The New York Medical Tribune says:—The author was not only an instructive writer, but possessed the happy faculty of making his subject interesting; and he was particularly qualified, by reason of his careful and thorough investigations of the phenomena of the nervous system, to write the book under consideration The book will not only be a valuable aid to the medical man in determining the signification of the train of symptoms exhibited in nervous disorders, but will furnish him with many useful suggestions as to the mode of treating such conditions.

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IT IS A TIMELY TREATISE and one of the best of its kind, written in a plain and manly way, free from sensationalism, yet marked by that glowing enthusiasm and earnestness which DR. BEARD brought into all his writings and sayings. It is also to be commended for the elegance and picturesqueness of its style. It will be a useful book and one easily mastered.—J. C. PETERS, M.D., *Late Pres. of the Medical Journal Association of New York.*

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Of all the books recently devoted to this subject, this one seems the most satisfactory. I regard it one of the best specimens of the late DR. BEARD'S writings. While the subject might have been made *prurient*, as in some books we know of, this has not the slightest approach to it; I find it written in the most instructive and proper style; with that independence and confidence characteristic of its author. His assertions are well backed by an abundance of clinical material, which dispel any doubt that may exist as to the correctness of his assertions.—O. D. POMEROY, M.D., *Surgeon to the Manhattan Eye and Ear Hospital; late Pres. of the N. Y. Ophthalmological Society.*

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PREFACE.

In acceding to the request to edit the posthumous manuscript of my former associate, Dr. Beard, on "Sexual Neurasthenia," I have done little more than arrange the papers in proper order, and fill up gaps here and there where the continuity was found to be broken. This was rendered comparatively easy, since much of the clinical material which had served as the foundation upon which he built many of his theories, had for many years been our common study. As early as 1868, after we had enunciated the idea that electricity was a powerful constitutional tonic in its action, and not merely a stimulant and excitor of paralyzed muscles, and had demonstrated the methods by which such tonic effects were best obtained, many cases were sent to us, which were then vaguely classed as general debility, hypochondria, or hysteria. Many of these cases, which had resisted all other forms of treatment, yielded with more or less rapidity to some one of the various methods of electriza-

tion, and first called our attention to the fact that the varied symptoms which went to make up the conditions so lightly spoken of as nervous prostration — sexual debility, hypochondria, and hysteria — had a far deeper origin and meaning than was generally supposed. With his keen powers of analysis, Dr. Beard was active in formulating the thousand and one symptoms constantly detailed, and gave them, as it were, a "local habitation and a name."

To him more than to any other is due the credit of having first described, under the head of "Neurasthenia," a congeries of symptoms, which has greatly simplified the treatment of such cases, and ought to do much toward the relief of a large class of suffering humanity.

Opinions will differ as to the value of some of his suggestions and conclusions upon this as well as upon many other themes with which his thought and pen were constantly busy, but that most of them were original, stamped with his own individuality, and presented in such a clear and lively way as to compel attention, all must agree. The section devoted to the perplexing subject of the physics of neurasthenia is handled with especial vigor and originality. It

will be found by every physician of large experience who has a well-kept record of cases, that those who have suffered from the effects of excessive dissipation, and especially along the line of sexual gratification, may be roughly divided into two classes: First, those whose disease was local and structural; second, those who suffered from general functional nervous disturbance; and it will be further found that the patients whose disease was local and structural, were most frequently from among the strong and non-nervous, while those whose disease was of a functional and general character were of the highly sensitive and nervous class. From this it is inferred that in the strong, functional excess tends to produce local structural disease, and in the weak and nervous, general functional nervous disease. The philosophy of this suggestion, based on the great resistance to molecular changes of the lowly evolved non-nervous organization, is discussed by the author in some detail and with much clearness. A notable characteristic of Dr. Beard's therapeutics, as illustrated in this and other works by him, was the number and variety of the measures prescribed, either alone or in combination.

He may have carried this to an extreme; but that he thoroughly believed in the efficacy of heroic methods was evidenced by his vigorous and unsparing self-treatment at various periods of his life, and especially in the earlier part of his last illness. His opinions were fearlessly as well as honestly given, and that he was in purity of thought and character, as well as through large experience, peculiarly fitted for the consideration of the delicate but important topics herein discussed, those who knew him best fully appreciate.

A. D. ROCKWELL, M.D.

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THE present treatise contains a part of a series of researches on Nervous Exhaustion, the first part of which was read before the New York Medical Journal Association in 1868, and published in 1869 in the Boston *Medical Journal*, and which was further developed and elaborated in my works on Neurasthenia and American Nervousness, as well as in various other writings in medical journals and papers read before medical societies.

The philosophy of this work on Sexual Neurasthenia may be thus very briefly formulized.

1. There is a special and very important and very frequent clinical variety of neurasthenia (nervous exhaustion) to which the term sexual neurasthenia (sexual exhaustion) may properly and conveniently be applied.

While this variety may be and often is involved as cause or effect or coincident with the other varieties of neurasthenia—exhaustion of the brain, of the spine, of the stomach and digestive system—yet in its full development it can be and should be differentiated from them just as general neurasthenia can be and everywhere now is differentiated from hysteria, simple hypochondria, insanity, and various organic diseases of the nervous system, with all of which it had until lately been confounded.

2. The long familiar local conditions of genital debility in the male—impotence and spermatorrhœa, prostatorrhœa, irritable prostate—which have hitherto been almost universally described as diseases by themselves, are, philosophically and clinically analyzed, but symptoms, and as such do not usually exist alone, but are associated sooner or later with other local or general symptoms of sexual neurasthenia herein described. Impotence as a symptom of structural disease, as ataxia, and other incurable spinal and cerebral diseases, is not considered in this work.

The passive congestion of the prostate, irritable prostate with prostatic catarrh, are analo-

gous to nervous dyspepsia and gastric catarrh ; tenderness of the testicles and prostate, to spinal irritation, cerebral irritation, irritable eye and breast ; heat and sweating of the parts, to cerebral hyperæmia, sweating of the hands and feet ; impotence in its various grades, to indigestion and decline in power of mental concentration—and all or many of these conditions may be associated, or appear in succession.

3. The causation of sexual neurasthenia, as of all the other clinical varieties, and of modern nerve sensitiveness in general, is not single or simple, but complex ; evil habits, excesses, tobacco, alcohol, worry and special excitements, even climate itself — all the familiar excitants being secondary to the one great predisposing cause—civilization.

This form of neurasthenia, like all other forms, is more common in America than in any other country, mainly on account of the dryness of our air and violent extremes of heat and cold, and opportunities and necessities of a rising civilization in a new and immense continent.

4. The treatment of sexual neurasthenia, like the causation, is complex—a union of local and general medication, of mental therapeutics and hygiene, and not by any specific drug or prescription. Constitutional is relatively far more important than merely local treatment, and medicine more than surgery, although in some

cases medicine and surgery need to unite their forces and work side by side. The therapeutics of this affection has therefore a very broad range, embracing the best known sedatives and tonics as well as the numerous mechanical devices for irritation and counter-irritation, and the improvement of nutrition.

Treatment mainly directed against any one symptom or cluster of symptoms, or special conditions that appear intercurrently in the disease—as spermatorrhœa or impotence, or lithœmia, or oxaluria, or phosphuria, or cerebral hyperæmia, or spinal hyperæmia, or any one of the array of morbid fears or morbid impulses, or insomnia, or depression—is unphilosophical and unsuccessful; for, granting that these symptoms or conditions may give way for a time, the nervous exhaustion of which they are results remains, and will again reveal itself in the same form or in many forms. The philosophy of treatment compressed into one clause is, not to clip at the branches, but to lay the axe at the root of the tree.

The present work, like the whole series of works on the nervous system of which it is a part—"Neurasthenia," "American Nervousness," "Stimulants and Narcotics"—aims to rebuild our knowledge of the nature and phenomena of nervous and mental diseases on the broad basis of *physics*. From 1871, when my work

on "Eating and Drinking" appeared, to the present moment, these writings have been and are a part of a general scheme long ago projected and never forgotten, the details of which, in obedience to the "law of evolution," have developed by successive increments, and are yet developing in my own mind. The study of trance, natural and artificial; the study of insanity in all its increasing varieties; the study of the action of drugs and the philosophy of foods; the study of epilepsy, of inebriety, as well as of the clinical varieties of nervous exhaustion to which this work is devoted—is and must be along the line of physics and evolution. Physiology is the physics of living things; pathology is the physics of disease, while evolution and devolution preside over them and over all the phenomena of nature.

The tree of the field is a symbol of the universe; the philosophy of evolution is itself an evolution; our ideas of growth must themselves grow, and can only diffuse and fasten themselves on society, ring by ring, branch by branch, leaf by leaf, like a widespreading vine. In the kingdom of what we call mind, as in the kingdom of what we call matter, nature is nothing but a series; psychology, like geology, is without catastrophes. Although the general philosophy of evolution has been a century before the world, only within the present generation has it been ac-

cepted by scientific experts; and even now the majority of educated men know not enough of it to accept or reject it; hence its special application to nervous disease, to which this work is one of various contributions, must, by the very law of evolution, wait long and patiently for its audience.

The practical application, however, of these writings on sexual exhaustion finds an audience already prepared, or nearly so, to comprehend and believe and criticise and act upon their suggestions. When but a few years ago the series of papers on this subject—of which this work is an extension—began to be published in the New York *Medical Record*, under the title "Nervous Diseases, Connected with the Male Genital Function," it was felt that an experiment was being undertaken the results of which could not be predicted. In my own mind, at least, there were doubts whether the profession were yet ready to study the subject systematically from this point of view. These doubts have been solved by the scientific literature of the subject that has since appeared, and promises to increase. Taking up these problems where Lallemand—one of the strongest intellects in medical history—left them, I availed myself, so far as might be, of all new and vital suggestions, medical or surgical, since his day, and of my own independent studies of cases and of the philoso-

phy of disease. I made the attack from the medical side, as a physician dealing with nervous and mental diseases, but have depended all along on the co-operation of surgeons, approaching the subject from the side of surgery. It will be observed that some of these views are in part a confirmation as well as extension of some of the views that have been lately pressed with especial persistence by Dr. Otis ; although my experience shows that surgery alone, unaided by medicine, and indeed local treatment alone, is powerless to overcome the complex and subtle symptoms of sexual neurasthenia, however important it may be, and is, in certain cases, as a helper an indispensable assistant.

No other book that has appeared since the publication of these various writings on neurasthenia has so nearly approached my views in general, and to a degree in detail, as that of Dr. S. W. Gross, who, though studying the subject as a surgeon, does not forget its very important and intricate nervous relations.

Most of the recent literature of neurasthenia, in all its relations, scientific and practical, and in its numerous clinical varieties, is of German origin. Since the publication of my writings on Neurasthenia and American Nervousness, quite a large number of treatises on these and kindred themes have appeared, advocating, analyzing, and criticising the views therein.

The following is a partial list of these publications. It will be observed from the titles that more attention is being given just now in Germany to *digestive* than to sexual neurasthenia. This variety of neurasthenia—digestive—was treated in the chapter on Nervous Dyspepsia in the Treatise on Medical and Surgical Electricity (written in connection with Dr. A. D. Rockwell), published in 1871, and subsequently translated into German, and again in my work on Neurasthenia as a part of the general neurasthenic condition :

Möbius. Nervosität.

Maienfesch. Nervosität und Nervenschwäche. 2d Auff. Bäsil, 1883.

Stein. Die allgemeine Elektrisation des menschlichen Körpers—der Nervenschwäche (Nervosität und Neurasthenie). Halle, 1882.

Huchard. Neurasthenia. Un. Med. 978, 1882.

Dowse. Brain and Nerve Exhaustion (Neurasthenia). London, 1880.

Herbert Spencer. The Gospel of Relaxation. Popular Science Monthly, January, 1883.

L. Löwenfeld. Die Erschöpfungszustände des Gehirns. München, 1882.

Althaus. Failure of Brain Power. London.

Julius Glax. Ueber den Zusammenhang nervöser Störungen mit den Erkrankungen der Verdauungsorgane und über nervöse Dyspep-

sie. No. 223 of Sammlung klinischen Vorträge. Leipzig, 1882.

R. Burkart. Zur Pathologie der Neurasthenia gastrica (Dyspepsia Nervosa). Bonn, 1882.

Glox. Ueber Nervöse Dyspepsie. 1878.

Leube. Ueber Nervöse Dyspepsie. Deutsch. Archiv für klinisch. Med. xxiii., Bd. S. 98.

Rosenbach. Krankheiten des Verdauungsapparates. Deutsches Med. Wochenschrift, 1879, No. 42–43.

Leyden. Ueber spinal irritation nach schwächenden einflüssen. (Deutsche Zeitschrift für pract. Medizin, No. 43, 1875.)

Kraft-Ebing. Ueber Irresein durch Onanie bei Männern. Zeitschrift für Psychiatrie. Bd. 31, 1878.

Hutchinson (F.). Schmidt's Jahrb., Bd. 190, 1881, No. 5.

Erb. Handbuch der Elektrotherapie.

Löwenfeld. Electrotherapie des Gehirns. Leipzig, 1882.

Fischer. Die allgemeine Faradisation. Archiv für Psychiatrie, Bd. xii., Heft iii.

Benedikt. Nervenpathologie und Elektrotherapie. Wien, 1879, S. 139.

Erb. Hdb. d. Krkhten des Nervensystems, I. S. 198, 1878, sowie in dessen Elektrotherapie, S. 267 ff. Leipzig, 1882.

Löwenfeld. Behandlung von Gehirn- und Rückenmarks-Krankheiten, etc. München, 1881.

MÖBIUS. Ueber allgemeine Faradisation, Vortrag gehalten in der Med. Gesellschaft zu Leipzig und referirt in der Berliner Klin. Wochenschrift, 1880, No. 47.

ENGELHORN. Allgem. Faridisation Centralbl. für Nervenheilk, 1881, No. 1.

FR. FISCHER. Die allg. Faradisation. Archiv für Psych., etc., Bd. xii. 3, 1882.

C. GERHARDT. Ueber einige Angeoneurosen, No. 209. Leipzig, 1881.

MYER MORITZ. Electricität in ihrer Anwendung auf practische Medicin. 4th edition. Berlin, 1883.

ULTZMANN (R.). Ueber die Neuropathien (neurosen). Des männlichen Harn- und Geschlechtsapparates.

ROSENBAUM (JULIUS). Geschichte der Lustseuche im Alterthurm. Halle, 1882.

The above writings on general faradization and central galvanization, as well as those specially devoted to nervousness and neurasthenia, contain discussions on nervousness and neurasthenia, since it is for these conditions that the general and central methods of electrization are particularly indicated.

A number of experts in their several departments have aided me for a number of years in the study and treatment of the class of cases described in this work. Without such aid, prog-

ress and precision in various directions, where my own knowledge and experience are deficient, would have been impossible. To W. F. Mittendorf I am indebted for most of the examinations of the urine, which have been made with most unusual skill and care, and have compelled me to alter my previous views on certain questions, and have been especially reliable as demonstrating these very important facts—

1st. That true spermatorrhœa — the flowing away of spermatic fluid in the urine, or after stool—is a very frequent symptom in all kinds of neurasthenic as well as in many other debilitating diseases; and that therefore the common and almost universal belief of the profession, taught in the text-books and lecture-rooms, and reiterated without doubting or inquiry in conversation and consultation, that it is an exceedingly rare condition, is a delusion, that is demonstrably false to any one who knows how to examine urine and takes time to do so.

2d. That oxalates and urates and phosphates in excess are observed, or are liable to be observed, in most of these cases.

3d. That the urine varies in quality not only each day and hour, but each moment almost, in nervous persons—is indeed barometric of the digestion and of the whole system.

4th. That the habit of naming diseases from

the products that appear in the urine, as spermatorrhœa, phosphuria, oxaluria, lithæmia, etc., is quite unscientific—is indeed no real diagnosis of the nature of the disease of which the varying conditions in the urine are accompaniments or incidents.

In a course of lectures before the University of New York many years ago (1868), I treated of this theme in some detail. Later still, I discussed the subject in two papers read before meetings of the American Medical Association; and still later, at a meeting of the British Medical Association in Cambridge. The discussion brought out by these lectures and papers revealed only a very feeble interest in the subject on the part either of surgeons or physicians outside of a very small circle, mostly of the younger men in the profession. There was at the time more interest in the matter in America than in Europe, but very little anywhere, the German literature of the subject being mostly of very recent date. At the meeting of the International Medical Congress in London, 1881, the general subject of nervousness in relation to decay of teeth was handled with much force by Dr. Norman W. Kingsley, of this city. The remarks which I made on his paper—a brief résumé of the whole subject—were neither fully comprehended nor received with full approval, as indeed they could not be, since they were op-

posed, from root to topmost branch, to the reigning philosophy.

The earlier writings on this subject, it may be interesting at this stage to note, were rejected at first almost uniformly by those to whom they were offered for publication. The original essay on Neurasthenia, which has been the parent of such a large literature in different parts of the world, was thrice rejected by medical journals before it was finally published, after it was read before the New York Medical Journal Association, in the Boston *Medical Journal*, April 29th, 1879. The absolute non-attention bestowed on the paper after it was published was a full justification of the editors who rejected it. Not until it reached Germany was it considered, or even understood. The original of the work on American Nervousness, which was the chapter on Causes of American Neurasthenia, was thought by the publishers to whom it was first offered to be of no special import to any human being, at least not of sufficient interest to put into type; and, when published, it was with the understanding, both on the part of the author and the publisher, that comparatively few of this generation would care to read it. The recent and repeated indorsement of its views by Mr. Herbert Spencer on his visit to America, in 1882, had the effect to arouse a transient and shadowy interest in this subject in

America, but even now the most instructive and fruitful contributions to the several branches of this theme are of German origin.

The subject is restricted mainly to sexual exhaustion as it exists in the male, for the reason that the symptoms of neurasthenia as it exists in females are, and for a long time have been, understood and recognized even by those who have never used or heard of the term neurasthenia. Very frequently a mistake is made in the treatment of these forms of female exhaustion, constitutional being almost displaced by local measures; but the condition is, by the best physicians, suspected from the patient's history before any examination has been made, and no attempt at treatment is made until there is a full diagnosis of the condition of the reproductive organs. Cases of sexual exhaustion in the male, on the contrary, are not suspected from the history given by the patient; no examination is made, and no inquiry into the sexual history or hygiene; it is not known what symptoms are to be regarded as indicative of genital disturbance or complication, and the general result is that these cases, which are very common, indeed fully as common, I think, as analogous cases in females, are dismissed as hypochondriacs, just as females suffering from now clearly explained uterine and ovarian disorders were formerly dismissed as hysterics.

Half a century ago, when women consulted their physicians for symptoms of pain in the back, difficulty of micturition, bearing-down sensations, pain in the vertex and other forms of head pain, insomnia and malaise, with mental depression, incapacity and indisposition for labor, the diagnosis for hysteria was almost always made. At the present time, a female with these symptoms, and other symptoms often associated with them, is submitted to examination by the gynæcologist, and, in very many cases, there is found a diseased condition of the reproductive apparatus — congestions, displacements, and the like ; and no treatment of these cases is regarded in any sense as scientific where such examination is not made, and where the proper local treatment is not employed. Whatever constitutional treatment is used, local treatment is considered indispensable—and, on the part of some, has been carried to an extreme, to the rejection or neglect of constitutional treatment. In this respect there is now a reaction ; by truly scientific physicians, both constitutional and local treatment are used in alternation or succession.

The functional nervous diseases of men are now in the same condition as the diseases of women half a century ago. Symptoms of mental depression, morbid fear in all its types and phases, hyperidrosis, nervous dyspepsia, palpita-

tion, deficient mental control, together with various forms of head, back, and body pain, are all referred to hypochondria ; and there is usually no thought of referring any of these symptoms to the reproductive system, on which they often depend. In the future it will be understood—indeed, it is beginning to be understood now—that the diagnosis of hypochondria in these cases is oftentimes as unscientific as the diagnosis of hysteria with analogous symptoms in women ; that whatever constitutional treatment be employed, there should go with it simultaneously, alternately, or successively, local treatment, especially to the prostatic urethra, which is so often the source whence all these difficulties originate, and by which they are maintained.

This view of the relation of the reproductive system to nervous disease is not narrow or one-sided, nor does it partake of the character of a hobby ; neither is it here pushed in any way to an extreme. It is in accordance with facts that are verifiable and abundant, that in men as in women a large group of nervous symptoms, which are very common indeed, would not exist but for morbid states of the reproductive system.

I knew of a case of prolapsus uteri where the patient was kept in bed for two years, and treated constitutionally for various symptoms, without any examination ever having been made

or suggested ; as soon as she fell into proper hands, she was treated by mechanical means, and at once relieved.

We censure, in the strongest words we can command, a physician who manages a case of female disease in this way, at the present time, because the teaching of the schools is clear and abundant, and general practitioners, as well as special practitioners, are expected to recognize, and do recognize, the nervous symptoms of women that suggest disorder of the reproductive system. When the relation of nervous diseases to the male genital apparatus is as well understood as their relation to the female genital apparatus, it will be regarded as an oversight of a serious character not to inquire and examine, as far as possible, into this local condition, when certain nervous symptoms appear. What lacerations of the cervix and perineum, irritations, congestions, and displacements of the uterus and ovaries, are to many female nervous symptoms, such are phimosis, redundant prepuce, varicocele, irritable testes, urethral contractions, and, above all and pre-eminently, irritations and congestions of the prostate and *prostatic urethra*, with spermatorrhœa, to many male nervous symptoms.

Diseases of the male genital organs have both a medical and a surgical side. The surgical side, relating to inflammations, injuries, specific

affections, and operative procedures of all kinds, is the exclusive province of treatises on surgery. The medical side, relating mainly to the nervous diseases and symptoms directly or indirectly connected with the reproductive function and organs, has thus far not been systematically studied by neurologists, while by surgical authorities it has been honored with only a partial and more or less unsatisfactory attention. The surgical writers have been the pioneers in observing the dependence of certain nervous maladies on genital disorders, and in recording their observations. On the whole, this fact is, perhaps, not entirely creditable to neurologists. The relation of the male genital function to the nervous system is intimate and complex, and is worthy of the best efforts of students of the nervous system.

Any one who is familiar with the literature of this branch of scientific inquiry, from the earlier periods down to the very latest and best surgical monographs in Germany, England, and this country, will allow that there has been a gradual tendency to refer, more and more, many of the morbid conditions of these parts to the nervous system ; while, especially in German works on nervous diseases, there has been at the same time a tendency to study more and more closely the relation of this function as a causative factor in certain maladies of the brain and spinal cord.

There are, however, very many questions that

are still open ; many more that are regarded as matters of opinion only, and concerning which opinions are as numerous as those who write or lecture upon them ; and not a few that science has passed utterly by. Some of these questions are of the very highest scientific and practical interest, and occupy the thoughts and attention of students and practitioners of medicine everywhere, and information in regard to them is earnestly welcomed, all the more because the inquirer is able to obtain so little assistance from medical literature or from the ordinary routine of medical instruction.

All purely surgical questions aside, there is quite a long series of diseases, symptoms, and hygienic problems involved in the relation of the genital functions to the nervous system, in the study and solution of which every practitioner has a direct interest. Among these the following may be specified :

True spermatorrhœa, its nature and effects.

Involuntary emissions, when pathological.

Impotence, its varieties and treatment.

The relative harmfulness of natural and unnatural methods of producing the emission.

Sexual excess as a cause of nervous diseases.

Reflex nervous symptoms from morbid conditions of the glands and urethra.

The effect of nervous and other diseases on the genital function.

In the study of the surgical relations I have been aided by indispensable surgical co-operation. I am especially indebted to Dr. M. Josiah Roberts for the skill, care, and success with which he has attended to these cases when operative procedures were required.

The cases described in this work are variously diagnosticated, according to the previous notions, education, temperament, age, and the consideration the physician may give to the case.

A typical case of neurasthenia, with a full catalogue of the symptoms that belong to that disease, consulting one physician would get the diagnosis of oxaluria; of another, phosphuria; of another, lithæmia; of another, uricæmia, of another, spermatorrhœa; of another, impotence; of another, cerebral anæmia; of another, cerebral hyperæmia; of another, insufficiency of the muscles of the eye; of another, hyperesthæsia of the eye; of another, astigmatism; of another, hypermetropia; of another, dyspepsia; of another, Bright's disease; of another, congestion of the liver; of another, spinal irritation; of another, spinal anæmia; of another, spinal congestion; of another, spinal hyperæmia; of another, spondyletus; of another, coccydinia; of another, hemorrhoids; of another, cystitis; of another, irritable prostate; of another, prostatorrhœa; of another, stricture of the urethra; of another, narrow meatus; of another, hyperæs-

thesia of the urethra ; of another, syphilis ; of another, malaria ; of another, pleuritic adhesion ; of another, hysteria ; of another, hypochondria ; of another, cerebral congestion ; of another, cerebral softening ; of another, general anæmia ; of another, nervous prostration ; of another, general debility ; of another, locomotor ataxia ; of another, progressive paresis of the insane ; of another, imagination and fancy ; of another, suppressed gout ; of another, latent gout ; of another, rheumatism ; of another, progressive muscular atrophy ; of another, epilepsy ; of another, melancholia ; of another, monomania ; and I have known all or nearly all of these diagnoses to be made by the best physicians of this generation in America and Europe, in the class of cases that are here described. In many instances, if not in all, there is a partial truth or intimation of truth in some of these apparently contradictory terms. The patient may have, perhaps does have, a number of these conditions, simultaneously or successively, but they are effects more than causes ; twigs and branches, rather than the trunk and root of which all the twigs and branches are an evolution.

In our own country the favorite mis-diagnoses of these cases are : general anæmia, cerebral anæmia, cerebral hyperæmia, indigestion, oxaluria, and imagination. In Europe these same terms are applied, and in addition they have in

England—perhaps only in England—a diagnosis of latent or suppressed gout, which is, to say the least, quite as popular there as is cerebral anæmia or hyperæmia or oxaluria with us. In Germany these cases are far better understood than in any other European country, and the best German neurologists in the great capitals would be likely to make a correct diagnosis and follow a philosophical plan of treatment.

CHAPTER I.

NATURE AND VARIETIES OF NEURASTHENIA.

NEURASTHENIA A CHRONIC FUNCTIONAL DISEASE OF THE NERVOUS SYSTEM.—THE RESULT LARGELY OF REFLEX IRRITATIONS ARISING FROM VARIOUS PARTS OF THE BODY. — INTOLERANCE OF CIRCULATORY DISTURBANCES.—TOLERATION OF DISEASES.—RELATION OF THE SYMPATHETIC NERVE TO NEURASTHENIA.—CLINICAL VARIETIES OF NEURASTHENIA.—PREVIOUSLY CONSIDERED AS A NEW FORM OF NERVOUS DISEASE.—ERRORS OF TEXT-BOOKS ON NERVOUS DISEASES.—MYELASTHENIA.— DIGESTIVE NEURASTHENIA. — TRAUMATIC NEURASTHENIA.—ILLUSTRATIVE CASES OF NEURASTHENIA CAUSED BY ACCIDENTAL INJURY.—HEMI-NEURASTHENIA.— HYSTERICAL NEURASTHENIA.—PHYSICS OF NEURASTHENIA.—THE PARADOXES OF NEUROLOGY.—THE HUMAN BODY A RESERVOIR OF FORCE.—THE PROCESSES OF EXHAUSTION AND SUPPLY. — HIGHLY EVOLVED (NERVOUS) ORGANIZATIONS HAVE LESS RESISTANCE.—AMERICANS THE MOST NERVOUS PEOPLE OF ALL HISTORY.

THE general philosophy of nervous exhaustion (neurasthenia), of which sexual neurasthenia is a clinical variety, may be condensed in the following propositions : The general philosophy of one variety is the general philosophy of all varie-

ties, and the study of any one variety aids in the study of all the others.

1st. Neurasthenia is a chronic, functional disease of the nervous system, the basis of which is impoverishment of nervous force; deficiency of reserve, with liability to quick exhaustion, and a necessity for frequent supplies of force; hence the lack of inhibitory or controlling powers, physical and mental—the feebleness and instability of nerve action and the excessive sensitiveness and irritability, local and general, and the vast variety of symptoms, direct and reflex. The fatigue and pain that temporarily follow excessive toil or worry, or deprivation of food or rest, are symptoms of acute neurasthenia, from which the chronic form differs only in permanence and degree. "Nervousness" is really nervelessness.

2d. The varying and multitudinous symptoms that accompany neurasthenia are largely the result of reflex irritations that take place not only through the ordinary motor and sensory nerves, but through the sympathetic system and vasomotor nerves. These reflex irritations may arise from any part of the body and may be transmitted to any other part; but the chief centres of such irritation are the brain, the digestive system, and the reproductive system.

3d. The heart and blood-vessels, through their abundant, complex, and sensitive nerve supply,

are quick to feel any such reflex irritation from any source. Thus the local and general blood supply of the body is liable to fluctuation, with a special tendency to local passive hyperæmia or nervous congestion. In the eye this condition can be inductively demonstrated. The circulation is thus kept constantly unbalanced, waves of hyperæmia pass from one organ to another under the influence of a myriad of exciting causes. Thus is explained the inconstancy and correlation of the symptoms, the caprice with which they come and go, and the substitution of one symptom for another.

4th. Innervation precedes circulation. These local and varied hyperæmias, with the special and local symptoms to which they give rise, are not strictly diseases, but the results of disease. These hyperæmias are the products of neurasthenia.

5th. The so-called cerebral irritation, spinal irritation, irritable eye (neurasthenic asthenopia), irritable ear, irritable stomach (nervous dyspepsia), irritable heart, irritable uterus, irritable ovary, and irritable prostate, are but special local manifestations of the general neurasthenic state. These special conditions cannot be scientifically studied, or treated individually or separately; but only in their relation to each other and to the trunk of which they are the branches.

6th. Neurasthenia may exist entirely indepen-

dent of anæmia. Its subjects are often exceptionally physically strong, and, with all their nervous weaknesses and pains, may be capable of severe muscular toil and endurance. It may, however, be complicated with anæmia and also with various organic diseases of which it is sometimes the result, though but rarely the cause. As the blood is the body in a fluid state, conveying the materials of the nervous system as well as of other tissues, it is probable that it changes in its constitution with the various states of neurasthenia ; and it is not improbable that such changes in the corpuscles at least may be in some way brought within the range of the senses.

Such, in substance, was the philosophy of neurasthenia, though less elaborated, that I taught in my first paper on the subject, as published in 1869, and subsequently republished as a chapter in Beard and Rockwell's "Medical and Surgical Electricity." Such, in substance, is the philosophy that has been taught, though in varying language and by diverse modes of illustration, in all my later writings ; and such, in substance, though modified in method of statement by individual idiosyncrasy and problems of reasoning, has been and is, so far as I can understand, the philosophy of all, or of the majority, of recent writers on neurasthenia in all countries.

Intolerance of Circulatory Disturbances.—A strong, healthy, well-balanced man

can bear local hyperæmia or anæmia without disturbance, and without knowing what is going on. A very high degree of hyperæmia of the brain is not pathological, but physiological; every great orator at the conclusion of an oration must have a congested brain; every writer who thinks at all must, after hours of composition, have time and diversion to equalize the circulation. Mr. Beecher tells me that after preaching his head and neck are sometimes so surcharged with blood that a large 17-inch collar is very tight for him; but in an hour or two the circulation is restored and no harm results. This is health; this is as man should be; but a neurasthenic person cannot tolerate hyperæmia or anæmia; the circulation does not tend to equalize itself, but becomes a fixed, passive condition—a pathological state where a vast army of symptoms associate therewith. It is not the hyperæmia nor the anæmia that causes the symptoms, but the nerve impoverishment that makes it impossible for the over-full organ to deplete itself and equalize the circulation; consequently what should be but a healthy flow of blood to an actively used organ, followed by a spontaneous emptying, with rest and repair, becomes a fixed, passive congestion, through which the blood flows slowly, like the water in our Southern lagoons.

TOLERATION OF DISEASES.—There is in the

human system a power of bearing morbid states. A condition which is to one man disease is to another man health, or at least a thing of indifference. Each man is his own standard of health, varying at different times in his health. What at one time he would call sickness, at another time he would call health or a negative. This power of tolerating disease comes partly from the physical, partly from the mental organization. A strong man intellectually will put up with or be indifferent to morbid phenomena which would make a weak man a life-long invalid, and drive him from business, perhaps to suicide. Likewise a very strong, vital, enduring, wiry constitution may bear attacks of nervousness which another temperament would not endure.

Relation of the Sympathetic Nerve to Neurasthenia.—The relation of the sympathetic nerve to neurasthenia is a subject to which considerable thought has been given, and most naturally, since the sympathetic nerve is believed to be the channel of intercommunication between one part of the body and another.

It is probable, also, that the sympathetic nerve acts—in some cases, at least—slowly, so that an injurious effect in one part of the body may not be perceived in another part until after the lapse of hours or days; and this would account, it may be, for some of the delay in the exhaustion and exacerbation that sometimes have followed

injurious influences of various kinds, in neurasthenia and neurasthenic states. That the sympathetic is involved in neurasthenia of all kinds is both probable and inevitable ; but there is no reason to believe that the difficulty is entirely or even chiefly there ; the sympathetic suffers, just as the cerebro-spinal suffers, just as the whole body suffers, from want of reserve nerve-force.

In the present chapter it is proposed to further extend, develop, and illustrate this general philosophy by a condensed analysis of the clinical varieties of neurasthenia, and of the physical principles by which the disease is explained.

Clinical Varieties of Neurasthenia. — The body is a bundle of reflex actions. An irritation in any one part is liable to produce an irritation in some other part, the nature and locality of which will depend on the degree of irritation and the constitution of the individual. This is true of all parts of the body, on the surface and beneath the surface, and of all organs, including, probably, the brain and spinal cord, injuries to which may be transmitted to other portions of the body, or to other portions of their own substance, indirectly as well as directly. There are certain organs, however, which, on account of abundance and complexity of their own supply, and the indispensability of their functions to life and the perpetuation of life, are

pre-eminently centres or foci of reflex irritation. Among the most conspicuous of these reflex centres are the stomach, the digestive apparatus, including the liver and intestines, the prostatic urethra, the uterus, the ovaries, and the eyes.

Some of the clinical varieties of neurasthenia derive their names from the fact that one organ or set of organs are more particularly involved in some cases than in others, and, either as causes or effects, are the chief avenues of suffering, and require special treatment and hygiene.

Next to the stomach the prostatic urethra is probably the most important centre of reflex irritation of the body. There is every reason, physiological and anatomical, why it should be so, and a close study of the symptoms of nervous debility proves that it is so. A morbid state of this part of the body is both an effect and a cause of nervous exhaustion ; for on the one hand it is impossible for one to have an irritable prostate and yet be in good health in other respects ; and on the other hand it is impossible for one to suffer from nervous exhaustion for a long time and not suffer in the prostate urethra.

Neurasthenia, therefore, like insanity, is divisible into a number of clinical varieties. These varieties receive their names from the part of the body especially affected, or from the causation or other important facts in the

clinical history, just as in the classification of insanity.

The classification of neurasthenia that I have been accustomed to use, and which has been proposed and employed in part in writings on the subject for a number of years, is as follows :

Cerebral neurasthenia (cerebrasthenia, cerebral exhaustion).

Spinal neurasthenia (myelasthenia, spinal exhaustion).

Digestive neurasthenia (nervous dyspepsia, or neurasthenic gastrica of Dr. Burkart).

Sexual neurasthenia (sexual exhaustion).

Traumatic neurasthenia (traumatic exhaustion).

Hemi-neurasthenia (hemi-exhaustion).

Hysterical neurasthenia (hysterical exhaustion).

A very peculiar set of symptoms that sometimes occur consist of explosions in the head, apparently in the back part of the head. A homœopathic practitioner, Dr. Searles, has lately published a number of cases where explosions of this kind occurred, and he has described these under the title of "A New Form of Nervous Disease." Rightly analyzed, these explosions in the brain are not masked epilepsy, nor are they epileptoid in any sense ; they are merely symptoms of the neurasthenic state, particularly when the brain and upper portion of the cord are attacked. In

this particular case these explosions occurred while falling to sleep. There are very many cases where the jerkings of the muscles, often throwing the body apparently up from the bed, occur, and these symptoms of explosions and jerkings may also appear at other times. Other symptoms in the case of this patient were, lack of mental control, neurasthenic voice—which was most noteworthy from the fact that he was a strong, vigorous-looking man—and attacks of frequent micturition. For two months he had had an attack of inebriety in a mild form, and was, to use his own language, "crazy for whiskey." From this attack he had recovered. Inebriety, as I have frequently urged, is one of the very many symptoms of the neurasthenic state. Neurasthenia, both of the general form and of the sexual variety, is one of the most frequent of the many exciting causes of inebriety, a nervous disease that may attack those who have never been intemperate. As usual, in cases of this kind, this patient was especially nervous and debilitated in the hot weather of July and August.

Few patients that consult me are so difficult to diagnosticate, especially in regard to causation, as the above case. There seemed to be at first no reason why the patient should have these symptoms; they had come on apparently without any traceable cause. He had had syphilis fifteen years before, and syphilis attacking the

nervous system might give rise to many of these symptoms, but it would not give rise to the whole group. Malaria we were obliged to exclude. I was compelled to see the patient two or three times before I got all his history in detail, or got a complete record of his symptoms. He had his urine examined by Dr. Mittendorf, who found absolute and clear proof of spermatorrhœa and oxaluria. On undertaking to pass a sound into the urethra, I found it was absolutely impossible to do so; he could not allow even a small sound to enter half an inch.

The whole history of the above case, taken together, made clear to me, beyond all question whatever, the diagnosis of sexual neurasthenia, caused mainly by a sudden change in sexual habits, a relative excess following long continence, and the hygiene and treatment were ordered accordingly. This patient, being a medical man, had read immensely on the subject, and the more he read the more distressed he became. Pathophobia, or fear of disease, was one of the symptoms; he had made a diagnosis of liver disease, of heart disease, of locomotor ataxia, and of "softening of the brain," and was surprised, as well as relieved, when I told him that he could not have any one of those conditions. He very rapidly improved under treatment.

This case is very instructive, as showing that

physicians, when they are attacked with neurasthenia of any kind, whether general or sexual, suffer more severely than any other class. They read; they read good books; they read German authorities; and the conclusion which they are obliged to draw from their reading is, that the symptoms indicate severe incurable organic disease of the brain or spinal cord, for the best authorities in the world tell them so, and it is not to be wondered that they become alarmed. One of the important medical wants of the age is the diffusion, through all the literature that the profession consult, of the points in the differential diagnosis of functional and organic disease. I have tried, as best I could, to make these points clear in other writings on "Nervous Exhaustion;" but, no matter how much may be written upon it, it must be many years before there shall be a thorough understanding on the subject in all ranks of the profession everywhere, and before our text-books on nervous diseases will have corrected the errors which they teach on this important theme.

All of these varieties of neurasthenia have, or are liable to have, common symptoms, the differentiation being in the special concentration of the symptoms in any one part, or in the causation and history.

That the above classification, or something similar to it—in that line at least—is justified by the

symptoms and histories of cases will be questioned only by those who have not seen many cases, or have mis-studied them.

Neurasthenia may concentrate itself almost exclusively on the brain—*cerebrasthenia*—with the symptoms of morbid fears and impulses, depression, insomnia, fulness, headache, impairment of memory, decline in mental force, and power of control, while the spine and stomach and prostatic urethra are unaffected, or but slightly so; although all these parts, especially the digestive and reproductive functions, must in time seriously suffer from severe brain exhaustion. The immunity of the spine in some of the cases of cerebrasthenia and digestive neurasthenia is a clinical fact often observed and very interesting; worn-out brain-workers, tied down to a few simple articles of diet, may never have backache or back weakness or soreness, and can sometimes walk all day unfatigued.

MYELASTHENIA, exhaustion of the cord, is much less likely to be uncomplicated than cerebrasthenia; most of the cases of spinal irritation and passive congestion, with tenderness and aching, etc., usually are troubled with insomnia, depression, and indigestion, but not always or of necessity. Some myelasthenics, who cannot walk or stand with ease, can yet use their brains to advantage, and with slight friction.

DIGESTIVE NEURASTHENIA almost always af-

fects the head, but in the early stages not sufficiently so as to interfere with customary duties. There are some neurasthenics whose stomachs are exceedingly irritable—who have, it may be, gastric catarrh, or who may not have it, but who will be well as soon as the digestion is perfect.

In the first edition of Beard and Rockwell's "Electricity" we described this variety of neurasthenia under the heading of nervous dyspepsia; and in my work on Neurasthenia I described the symptoms of that condition as parts of and belonging to the neurasthenic state.

Since the publication of these works the subject has been discussed by a number of German writers, who have followed in general the philosophy above indicated. Leube, in 1878 (quoted by R. Burkart), writes of "Nervous Dyspepsia," and Burkart himself, in his monograph, "Zur Pathologie der Neurasthenica Gastrica" (Dyspepsia Nervoser), gives a most intelligent résumé of the whole subject, and details a number of cases. The acute and scholarly reasoning of these Germans is earnestly recommended to all students of this subject.

The fourth variety, sexual neurasthenia, is the subject of the present volume. It is probably, on the whole, with all its complications, the most important of all the varieties of neurasthenia.

The term *traumatic neurasthenia* I have lately

applied to those cases of nervous exhaustion excited by mental and physical injury, or by both combined.* Railway and riding accidents, the shock of bad news, may cause neurasthenia either immediately or secondarily as after effects, and all of the symptoms of all the varieties of neurasthenia may be developed by these physical or mental injuries. It is impossible to tell from the symptoms themselves whether they were brought on by traumatism or appeared in the usual way by usual causes.

TRAUMATIC NEURASTHENIA has no symptoms, or groups of symptoms, that are diagnostic; indeed, by the symptoms alone we should not know the cause. The symptoms are precisely the symptoms which are found in neurasthenia coming from other causes, or combinations of causes, and the treatment is substantially the same; but, as my experience makes pretty clear, the prognosis is better than the same symptoms where they come on slowly, and as a result of causes acting through many years. I would rather have under my care a case presenting all the army of neurasthenic symptoms brought on suddenly, by accident, as railway shock, or being thrown out of a carriage, or being on a boat that has taken fire, or in a theatre where fire has broken out. I would pre-

* New England *Medical Monthly*, March 15th, 1882, p. 247.

fer a case of neurasthenia from some such cause, than from any of the usual congeries of causes. Mr. Erichsen, in his very excellent work, "The Concussion of the Spinal Cord," describes some cases of traumatic neurasthenia, though he does not use this phrase. Some persons who are injured by railway accidents become very hysterical and sleepless, and dyspeptic and debilitated, and cry easily, especially on the trial. These features are well portrayed by Erichsen. Persons of this kind are not necessarily usually shamming; they are real sufferers; they are nervous, just as they appear to be; but they have no organic trouble; and, as Mr. Erichsen clearly and truthfully points out, when the excitement of the trial is over, and they get the money for their damages, their recovery is very rapid. A case of that kind, of great interest, I once had under my professional care, and had a chance to observe the patient's conduct in court and after the trial was over.

In the following cases there was no legal complication, and no suspicion even, of any shamming. A celebrated horse-tamer and trainer was kicked in the head by a horse. There was no history of nervous disease in the family, but for fifteen years from that time, up to the time that he consulted me, he had been more or less nervous. The bone was not broken, but erysipelas appeared. Among other symptoms, he

had abnormal frequent seminal emissions which reacted on his head, and there was close communication between the top of his head and the prostatic urethra, as there often is in cases of sexual neurasthenia; and, though naturally a very strong man, he was attacked with profound exhaustion after giving one of his lectures. He was much troubled with sleeplessness, and he also had neurasthenic asthenopia, so that his eyes troubled him much, on using them, a very common thing in neurasthenia of all the varieties, and one which is not necessarily relieved by glasses, or by any means known to any local treatment whatsoever, although glasses are sometimes indicated. A feature about the case which was specially interesting was that while he could dictate at great length (he was writing a book on horses), he could not write with his own hand, even a postal card, so profound was his nervous bankruptcy.

During the past year I have seen a lady who was twice thrown out of a carriage, and had a severe injury to the nervous system, but without any important physical injury; no bones were broken, and there had been no very powerful concussions, but she suffered somewhat from concussion as well as from fright. The lady was originally nervous, but became much more so after this last accident: lost appetite, lost digestion, lost naturally good spirits;

she wished to be alone ; could not see any one except near friends. Under time and rest, sedative and tonic treatment, she has got substantially well, if not as well as before.

I have now under care a young lady who fell from a sleigh last winter. For three days she was unconscious. Her mother is delicate, but the young lady was in good health up to the time of the disaster. When she consulted me this fall, she had the following symptoms : dyspepsia with flatulence, constipation, insomnia, depression, asthenopia, numbness in left side ; she could walk only a short distance, whereas, formerly, as she said, she could walk twenty miles a day. Her worst symptom was phobia, a morbid fear that some dreadful thing was about to happen. She would cry frequently ; had lost twenty pounds in weight. Under sedative and tonic treatment, management of diet, and hygiene and rest, though not absolute rest in bed, this lady has improved right along from week to week. I have no doubt that in time she will recover wholly. She certainly improves more rapidly than the majority of cases of the same symptoms, where other causes have produced the symptoms.

The Seawanhaka disaster furnished a remarkable illustration of the power of a great accident to act on the mind as well as the body, and produce a long array of nervous symptoms. I have now

under my care a lady who was one of those on board at the time, and with her family was saved, but who has never been well from that day to the present. She was not in perfect health before, but all her evil symptoms are much aggravated by the accident. The steamer was rapidly burned, but she used a life-preserver, jumped over and was saved, after being a long time in the water, but the excitement of the accident, the anxiety with regard to her family, brought on a reaction which appears in the following symptoms: mental depression, a movement of the head from side to side on retiring, nervous cough, stiffness of the neck at times with symptoms of spinal irritation, podalgia, swelling of the feet; and so remarkable is the influence of the mind that any trouble causes pain in the feet; poor appetite, poor digestion, very poor and uncertain memory. This patient has also a morbid fear: she is afraid to go to the theatre, but can go to the opera. She dreads to go to the theatre especially, because she apprehends that if a fire breaks out she cannot escape, and yet at the opera she is not in trouble. Even now, after she has improved very decidedly in all her symptoms, she does not think she can venture to the theatre. Another illustration of very many that the morbid fears are the hardest symptoms to cure among the neurasthenics. She also fears sounds, noises of any kind, and

when I began to treat her she could not bear the sound of the faradic battery, and I was compelled to use the galvanic, since electricity was one of the various remedies which I wished to use in her case. After she had improved somewhat there was no difficulty in using the faradic current, which at first would have driven her wild. This lady is a person of strong will and decision, and not disposed to magnify, but rather to minify her troubles, and was induced to take treatment through her husband's persuasion rather than by her own will. The case is of interest as illustrating the well-known law that though one may be cool in the hour of peril, and have great presence of mind, yet all must be paid for in nerve-force, and if one be poor in nerve-force, the account is overdrawn by these excitements, and it may take some months and sometimes years to recuperate. This lady has a daughter who was on board the steamer at the time, and she also suffers, and has been suffering ever since, although before that she was in approximately perfect health. She also was so nervous that she could not bear the sound of the battery. Dr. Crothers tells me that after railway accidents, where there has been great excitement, persons who are not killed or wounded rush off to liquor saloons in order to get a drink, to make up for the exhaustion and excitement. My former associate, Dr. A. D. Rockwell, has

given me some of his own interesting experiences while serving as surgeon during the late war. Immediately after the excitements and dangers of a great battle, he often noted among both officers and men an abnormal craving for alcohol and the strongest tobacco, out of all proportion to what would naturally follow the same amount of purely physical labor. I have seen illustrations of the fact that, after great fires and accidents of any kind where men are injured, there is still a large number whose nervous systems are injured, but whose names do not appear in the papers, and who are never reported as sufferers, but who do suffer in the way above described, far more, perhaps, in some instances, than those who have broken limbs or disfigured countenances.

HEMI-NEURASTHENIA is a term that I have applied * to those cases where the neurasthenia affects one side—usually, if not always, the left—much more than the other. The lid on the left side may droop more than the other; the left eye may be specially amblyopic or photophobic, the arm and leg on the same side may be numb and weaker and colder, or tremble more than normal; specks may appear more frequently in the left eye, and roaring in the left ear, and this differentiation of the side of the body may be a constant condition.

* "Nervous Exhaustion (Neurasthenia)," second edition, p. 75.

Hysterical Neurasthenia is found in women oftener than in men or boys, but both sexes have it. One of the very worst cases I ever saw was a man. When neurasthenia and hysteria are commingled, the patient sometimes exhibits only neurasthenia, sometimes positive hysteria in addition. The diagnosis and appellation is hysterical neurasthenia. Many of the bed-ridden and bed-treated women are of this class; all or very many of the symptoms of general or special neurasthenia are theirs, and besides, at times, hysterical convulsions, attacks of crying and laughing, the globus hystericus, moral decline, excessive urination, and other symptoms that have long been known to belong to hysteria.

Hysteria is a malady that requires subdivision: the physical variety and the mental variety. Physical hysteria is the result purely or mainly of physical causes, local or general, usually some disorder of the sexual system co-operating with neurasthenia or anæmia. It is a disease of debility. Mental hysteria is the result, purely or mainly, of psychical causes, acting usually on an emotional and superstitious temperament. It is a disease of the strong, the full-blooded non-nervous. The two forms are sometimes united; any case of hysteria may partake of the characteristics of both varieties. Neurasthenia is the widest of all the doors that open to physical hysteria; the door is indeed

so wide and the vestibule so large that it is impossible to tell just when a neurasthenic woman has become hysterical; and there are many who spend their lives hopping backward and forward from one state into the other.

PHYSICS OF NEURASTHENIA.—No one fact relating to neurasthenia has caused so much perplexity to the students of this disease as the capacity of neurasthenics for severe mental exertion, oftentimes through a long life. This fact, which must be admitted and is admitted by all who have seen and thought for themselves on this subject, has been noticed by a number of friendly critics of the works on Neurasthenia and American Nervousness, and of my other writings on allied themes; and some, as it appears, have suffered themselves to be puzzled and pushed back by this difficulty, into doubting and denying the existence of neurasthenia, the most frequent of all forms of nervous disease. For a like reason, the fact of the greater nervousness of the American people has been questioned, since on this continent more work is done, and more rapidly, than in any other country of the world.

The union of nervousness and neurasthenia with capacity for mental labor is one of the paradoxes of neurology, but like many other paradoxes of science can be reconciled and made consistent if we go deep enough in our researches.

Physiology is the physics of living things; physics is the science of the forces of nature. The human body is a reservoir of force constantly escaping, constantly being renewed from the one centre of force—the sun. A perfectly healthy man has a large amount of nerve-force in reserve, and this reserve is not often exhausted, even approximately, by the necessary toil and wear of mind or muscle; there is ever a broad margin of force behind and beyond that required for existence and the war for existence, on which in special and powerful emergencies he can draw, with no other effect than temporary fatigue, that disappears under rest, sleep, and food.

A neurasthenic (nervously exhausted) man has a small amount of nerve-force in reserve, and this reserve is often and speedily exhausted; the margin on which he can draw is narrow—may be almost wiped out under the calls of emotion and of mental or bodily labor—but just as with the strong man, the force is renewed from without by food and repose, so that, like the strong man, he can keep on thinking and worrying and working until he dies, which may be long after the death of the strong man.

The processes both of exhaustion and supply take place more rapidly in the nervous than in the strong: they do more work, deliver more force in a short time, and correspondingly they must eat oftener and of food that is digested with

less vital expenditure ; and they cannot so well bear the deprivation of sleep ; and if these conditions and limitations are regarded, the nervous man may be even more industrious and active than his stronger brother, provided that the exhaustion does not go to a profound extreme. While neurasthenia makes life painful and irritating, it does not of necessity shorten life, nor does it always destroy its usefulness. Much of the world's best work has been done by neurasthenics. George Eliot, Darwin, Heine, Spencer, Edwards, Kant, Bacon, Montaigne, Joubert, Rousseau, Schiller, illustrate the possibility of not only living, but of doing original work on a small capital of reserve force.

The Indian squaw, sitting in front of her wigwam, keeps almost all of her force in reserve ; the slow and easy drudgery of the savage domestic life in the open air—unblessed and uncursed by the exhausting sentiment of love ; without reading or writing or calculating ; without past or future, and only a dull present—never calls for the full quota of her available force ; the larger part is always lying on its arms.

The sensitive white woman—pre-eminently the American woman, with small inherited endowment of force ; living in-doors ; torn and crossed by happy or unhappy love ; subsisting on fiction, journals, receptions ; waylaid at all hours by the cruellest of robbers, worry and ambition,

that seize the last unit of her force—can never hold a powerful reserve, but must live and does live, in a physical sense, from hand to mouth, giving out quite as fast as she takes in—much faster oftentimes—and needing long periods of rest before and after any important campaign, and yet living as long as her Indian sister—much longer, it may be—and bearing age far better, and carrying the affections and the feelings of youth into the decline of life.

Physical analyses help to bring this paradox into science. The Indian squaw is a mill-dam behind which is a large reservoir of water that never wholly or nearly runs away, but is always full and has far in excess of the power to turn the wheel; a large furnace filled with fuel, but with moderate draught, and giving forth but little heat in a limited time, that can burn long without a new supply, maintaining a steady but not strong temperature; a battery with immense potential force, that, on account of great internal resistance, becomes only in small part actual force, and so is literally a constant battery, evolving a mild but sure and equable quantity of electric force through long time, even when uncleaned and uncared-for; a clock that runs for many days without winding; an engine with immense boiler-power, and capable of running more machinery than is ever connected with it; an electric light fed by a large dynamo and supplementary stor-

age battery, and that still gives illumination with unfaltering brilliancy long after the dynamo is at rest.

The neurasthenic is a dam with a small reservoir behind it, that often runs dry or nearly so through the torrent at the sluiceway, but speedily fills again from many mountain streams ; a small furnace, holding little fuel, and that inflammable and combustible, and with strong draught, causing quick exhaustion of materials and imparting unequal, inconstant warmth ; a battery with small cells and little potential force, and which with little internal resistance quickly becomes actual force, and so is an inconstant battery, evolving a force sometimes weak, sometimes strong, and requiring frequent repairing and refilling ; a day-clock, which, if it be not wound up every twenty-four hours, runs utterly down ; an engine with small boiler-power, that is soon emptied of its steam ; an electric light attached to a small dynamo and feeble storage apparatus, that often flickers and speedily weakens when the dynamo ceases to move.

So long as the reservoir behind the dam is not shut off from replenishment, and the dam itself does not give way ; so long as the furnace does not crack or burn out ; so long as the battery is not broken or eaten away by chemical changes ; so long as the works of the clock are uninjured ; so long as the boiler is not badly incrusted and

does not explode ; so long as the dynamo and storage apparatus are in working order, these appliances can continue to give in their own way their respective forces ; and, as is made clear by physical theory and demonstrated by experience, the small reservoir, the small furnace, the small battery, the day-clock, the small boiler, the small dynamo are little if any more likely to permanent and irreparable injury than the larger appliances of the same kind, and they may abide in active use in some cases, it may be, even longer.

What we call organic or structural disease corresponds to serious and structural injury of the machinery in developing and using mechanical forces ; what we call functional disease—the neuroses—is simply abnormally rapid exhaustion of force and consequent necessity of frequent intervals of rest and resupply. Functional disease in its purity does not lead to death, but functional and organic diseases may be combined ; the battery may be small and the internal resistance slight, and at the same time the plates may be broken or hopelessly injured by chemical combination.

Highly evolved (nervous) organizations have less resistance to molecular changes than the lowly evolved (non-nervous) organizations ; they are better conductors of all forms of motion ; reflex actions of all kinds take place in them more rapidly, in a far more complex way, and under

slighter irritation ; the echoes of nerve disturbance resound through every organ of a nervous man ; but in the strong they meet with such greater resistance that they die away near the point of departure ; *hence it is that in the strong, functional excess produces local functional disease, and in the nervous, general functional nervous disease.*

This greater resistance of the strong and wiry is the cause in part of their greater liability to organic disease ; for in overcoming this resistance the nerve-force is more liable to cause local injury than the same force traversing a smooth and easy pathway ; whereas in the nervous and hysterical the resistance is reduced so low that any irritation in any part of the body is speedily telegraphed to every other part ; a nervous man cannot long be sick with any form of disease without being sick all over ; the active "sympathetic" informs the whole system ; but this very quickness of intercommunication, on account of the feeble resistance of the nerve-fibres, makes it hard or impossible to excite local organic disease ; hence the antagonism that I long ago and often pointed out between nervousness and functional nerve diseases, including the severest and meanest hysteria and such horrible and hopeless maladies as cancer, gout, rheumatism, various tumors, alcoholism, inebriety, epilepsy, ataxy, certain forms of insanity. Those who are at least moder-

ately strong—whose nerves interpose some resistance to the passage of molecular motion—are more likely to suffer structural change than the weak and nervous. Hence it is that those cases of hysteria that strike all the notes of nerve disorder in a single hour or day—to whom each second seems a rescue from death—live to wear out all their friends and bury all their doctors. Lightning never kills or even hurts unless it finds resistance, and important resistance, in its path ; unless it be resisted, electricity is not felt at all ; if the human body were a good instead of a very poor conductor of electricity, the application of electricity would have no therapeutic power, and the great art of electro-therapeutics would never have been born. In a contest with the neurasthenic and hysterical, death has poor chance ; all physics is against it. As soon as it attempts to collect a sufficient quantity of force in any one point to cause an explosion or do any sort of structural harm, the non-resisting nerve-fibres conduct it away, scattering it everywhere ; thus our very weakness becomes our strength and our salvation ; thus the Americans, the most nervous people of all history, are also the most laborious—do more work of a certain quality, though not of the highest, under their nerve-exhausting climate, than any other people of all history.

CHAPTER II.

EVOLUTION AND RELATION OF THE SEXUAL SENSE.

THIS SENSE ANALOGOUS TO THAT OF TASTE.—SUBJECT TO VARIATIONS DEPENDING ON THE INDIVIDUAL IDIOSYNCRASIES.—FAMILIAR FORMS OF INSANITY.—IMPAIRMENT OF MEMORY.—THE REPRODUCTIVE SYSTEM.—EVOLUTION AND ITS OPPOSITE, DEVOLUTION.—THEIR EXPLANATION.—LOCAL SEXUAL DEBILITY.—THE HIGH SCIENTIFIC AND PRACTICAL INTEREST OF THIS SUBJECT.—ITS FREQUENCY AND COMPLEXITY IN THE UNITED STATES EXPLAINED.—THREE GREAT CENTRES OF REFLEX IRRITATION: THE BRAIN, THE STOMACH, AND THE GENITAL SYSTEM.

THE order in which some of the chief organs and functions of the body are evolved is as follows:

1. Heart.
2. Brain.
3. Eye.
4. Ear.
5. Nose and mouth.
6. Digestive system.

Subdividing some of these functions, the evolution is as follows:

1. Common sensation.

2. The special senses.
3. The reproductive senses.

Subdividing the mind, the evolution would be thus :

First : The emotions, including the moral qualities.

Secondly : The reason, including the higher memory.

The sexual sense, like all other senses, is but an evolution or differentiation of common sensation, the basis of them all. The orgasm in coitus is analogous to the sensation experienced in vigorous scratching to one troubled with itching. The analogy is made more complete by the fact of observation that scratching excessively, like excessive sexual indulgence, is irritating and exhausting to the constitution. This sense is also analogous to that of taste, which sometimes almost reaches an orgasm.

It is a principle of evolution that functions, when disturbed by disease, decline, decay, and disappear in the reverse order in which they develop. Devolution is the opposition of evolution.

The functions of the human body that are last in order of development are the reproductive and productive—the power to reproduce the species, and the power of abstract thought, including memory. Puberty is not reached until between the ages of ten and fifteen, and few persons of either sex attain the power of thinking

for themselves on abstract problems until considerably after puberty ; prior to that time they but photograph, save in the specially precocious, the thoughts of their environment. Therefore, when the nervous system is attacked by enfeebling disease, these latest evolved functions, thinking (including the memory of thoughts) and reproduction, should first suffer ; and it is found that they do so suffer, and oftentimes before any other function is disturbed, although such disturbance is not always observed by the patient. Any moderate impairment of thought, power and correlated impairment of memory may exist for a long time unobserved ; and so also moderate impairment of the sexual system may exist for a long time unobserved by one who does not habitually exercise that function.

When the body is attacked with disease, these later developed functions first feel the effect of that disease ; the reason and memory, the auditory nerve, the eye, the facial expression, common sensation, the extremities of the fingers and toes, the stomach, and pre-eminently the genital function, are the first to be affected ; and thence the disease extends downward to a more primitive and fundamental function.

This law is subject to variations, depending on the individual idiosyncrasies and special hereditary idiosyncrasy ; thus, where there is hereditary disease of the mind, insanity or epilepsy

may appear while yet the special senses are untouched ; but the progress of insanity and epilepsy in the brain will be in conformity with the law of devolution—from above downward, as follows :

1. Decline in manners—that is, minor morals.
2. Decline in the power of originating thought.
3. Decline in the power of acquiring thought.
4. Decline in memory of recent events.
5. Decline in memory of old events.

While the power of originating thought along the line where the delusions exist may decline before the manner of moral character, and probably does in some cases, yet decline in manner, the first stage of moral decline, is always, or is almost always, the first observable symptom of insanity, since it appeals to the senses far more directly and clearly than simple suspension or perversion of the intellectual powers. It is certain that insanity without moral decline is inconceivable ; and in that sense all insanity is moral insanity. I never give a certificate of insanity in any case unless I can find severe evidence of moral decline, and I always specify moral decline in my certificates for commitment.

Not only in the familiar forms of insanity, as progressive paresis, melancholia, mania, monomania, but in the less familiar forms, as the severest of inebriety and opiomania, and also in border-liners, as I am accustomed to term

them—cases where the mental responsibility is impaired, but not seriously enough to justify the diagnosis of insanity—as in hysteria, hysteroidal states, and extreme neurasthenia, general or sexual, or in any of its varieties or subvarieties, moral decline is sure to appear after the disease has reached even moderate severity ; and in insanity proper this decline becomes serious. The remark of Dr. Johnson, "Every man is a rascal as soon as he is sick," is one of the most profound and important psychological suggestions in literature.*

It follows theoretically—and the study of cases confirms this view—that neurasthenia may exist for some time before the patient is aware that he is neurasthenic ; the leaves and blossoms, twigs and tips of the branches may begin to fade while yet the tree remains sound and strong ; and not until the disease in its progress *from above downward*—which is the law in disease—attacks some of the main branches or the trunk—the stomach, the base of the brain, the spine—is the man conscious of being sick. Indigestion, insomnia, depression, and physical debility are among the symptoms first observed by neurasthenics ; but long before the symptoms

* For further remarks on the relations of evolution to insanity, see my paper "On the Symptoms of Sanity and the Diagnosis of Insanity," in the *Journal of Nervous and Mental Diseases*, July, 1882.

appear the higher intellectual functions and the reproductive function have been impaired.

No one alleged symptom of neurasthenia is more frequently and generally denied and doubted by medical writers than impairment of memory; those who claim that they suffer in that way are classed as hypochondriacs—which sometimes may be true; but enfeeblement of memory, fluctuating and inconstant, and far less severe than dementia and trance-like states, is not *only the first, but probably the most frequent, of all symptoms of nervous disease,* and is as genuine as the pitting in small-pox or the crepitus of a fractured limb.

In the reproductive system, such conditions as spermatorrhœa; the flowing away of semen in the urine; the different grades of impotence, even to utter want of power of intromission; irritable prostate, with mild dribbling of the urine and frequent urination; oxaluria, phosphuria, lithæmia —may arise and persist for months and for years without the knowledge of the individual; but sooner or later other functions will perceptibly suffer—as the digestion, the power of mental concentration, the spine, the bowels—or the genital function may suffer so deeply as to compel attention.

The first suspicion of impairment of memory is oftentimes excited by an attempt to add up a column of figures.

The first knowledge of impairment of the reproductive function is oftentimes obtained after attempts at coitus after long abstinence.

EVOLUTION AND ITS OPPOSITE, DEVOLUTION, explain these two facts—1. That the genital function is first to feel disturbance of the nervous system, as the top of the tree first shows that the roots are not properly nourished; 2. The fact that such disease of the genital functions does not at once affect the whole body.

Disease of the stomach or of the brain makes us at once sick all over; no one can be well and be dyspeptic or have a cerebral congestion; but mild and even severe impotence may exist and the individual be in other respects well. The explanation is that the function of generation, being the last to be developed of the functions, has nothing directly depending on or issuing from it; it is a twig, and not a main branch, like the stomach and brain; it is a periodic function, capable of long intervals of inactivity, not of short intervals, like the digestive system and brain, or constantly active like the kidneys or skin or lungs; and the rest of the body cannot only survive, but be in good condition, for a time at least, when this function is absolutely dead. Just as one can be in good health without important thinking, so he can be in good health without reproducing; the function

of abstract thought, like the function of generation, brings a late development.

And yet there is in every individual a border-line of local sexual debility, that cannot be passed without bringing suffering to the whole body or to some of its chief organs; so sexual neurasthenia leads to nervous dyspepsia, constipation, or diarrhœa, cerebral congestion, with headache, insomnia, morbid fears and morbid impulses, various disorders of the eye and ear and larynx. In highly-wrought, sensitive temperaments this border-line is reached far more quickly than in the tough-fibred and phlegmatic; for the stronger the constitution the greater the resistance to the conduction of nerve impulses, and the longer the time required for local disease to become general disease. In the old-fashioned constitutions the replies are slower and less complex than in the new-fashioned — the American — constitution; therefore the old-fashioned constitution is more liable to severe local disease and the new-fashioned more liable to mild and general disease. This generalization, based on physics, as we shall see, is of high scientific and practical interest, and helps in the solution of many puzzling problems.

It explains the increasing prevalence of all the varieties of neurasthenia.

It explains their greater relative frequency and complexity in the United States.

It explains the recent increase of neurasthenia in Europe, even in Germany.

It explains the existence and persistence of impotence of a severe degree in the phlegmatic and strong, and its rarity in the nervous and delicate. The sensitive frame conducts nerve-vibrations so rapidly that they cannot remain localized, but must thrill through the whole system ; the non-sensitive frame conducts nerve-vibrations so slowly that, unable to overcome the resistance, they turn on themselves and expend their force on or near their point of departure. Hence it is that the sensitive man gets warnings sooner than the strong man ; light injury of any part is telegraphed to every other part ; whereas the strong man, like a general cut off from telegraphic communication with all parts of his army, may lose a wing, and even a division of that army, without knowing it.

The body of the sensitive man is a microcosm of reflex actions, and the three great centres of reflex irritation—the family of reflex centres—are the brain, the stomach, the genital system ; between these, messengers of evil or of good are ever passing, in sleeping and in waking hours ; to touch one is to touch all. These three are literally a trinity—three in one, one in three : they cannot be isolated.

Besides these three general centres there are sub-centres, all of importance, all to be con-

sidered in the study of nervous diseases—the spine, the eyes, the teeth, the glans penis, the ovaries—for disease of any of these parts may cause disease of any other part.

From this general and demonstrable and important fact, false reasoning unlimited has sought to show that *all* functional nervous diseases whatsoever come from the eyes, and that right glasses are a specific for neuroses ; that removal of the ovaries is the true treatment of neurasthenic women ; that all nervousness, including morbid fears and morbid impulses, must depart after surgery has cured a lacerated cervix ; that the opening of a stricture opens the door of escape for every other disease that afflicts the sufferer. Disappointments increasing and beyond enumeration attend those who look only at *one* of these many centres of reflex irritation and see not the others, and act in consonance with their seeing ; and yet the *general* principle behind all these procedures is scientific, philosophic, probable, and in some cases these local operations are justifiable as experiments purely ; but large and well-studied experience in these matters will keep one from being excessively sanguine in any case.

CHAPTER III.

THE RELATION OF NEURASTHENIA TO OTHER DISEASES.

TO MALARIA. — TO SYPHILIS. — TO CYSTITIS. — TO ORGANIC DISEASES.—TO CONSTIPATION.—TO HYPOCHONDRIASIS.—ILLUSTRATED CASES OF FALSE HYPOCHONDRIA.—DEMONSTRABLE DISEASE USUALLY THE BASIS OF SO-CALLED HYPOCHONDRIASIS. — ACTION OF MIND ON BODY. — SEXUAL HYPOCHONDRIASIS. — RELATION TO INSANITY IN GENERAL.—EXTREME CASES OF NEURASTHENIA DEVELOP THE MELANCHOLIA FORM OF INSANITY.—BORDER-LINERS, OR MONOMANIA SYMPTOMS. —RELATION TO NYMPHOMANIA, EROTOMANIA, AND SATYRIASIS. — SEXUAL PERVERSION. — ITS PSYCHOLOGY. —RELATION TO EPILEPSY.—TO NEURALGIA.—TO HAY-FEVER.—TO INEBRIETY.—TO RHEUMATISM AND RHEUMATIC GOUT.—TO LITHÆMIA OR URICÆMIA.—TO KIDNEY DISEASES.—ALBUMINURIA OR BRIGHT'S DISEASE.

NEURASTHENIA is a diseased state rather than a special, limited, and geometrically defined disease. It is a generic morbidity which, as Möbius of Leipsic has well shown in his work on Nervosität, overlaps and runs into numerous other morbid states or diseases or symptoms, to which the terms hypochondria, hysteria, sexual perversion, and so forth are applied. Sexual

neurasthenia, no more than any other variety of neurasthenia, can therefore be studied by itself and of itself alone ; to make ourselves expert in it we must look on all sides of it, and study its relations to the above-mentioned and other diseases to which it is liable to stand in the complex relation of *cause*, *effect*, *coincident*, *and antidote*.

To thoroughly know neurasthenia we must know other diseases, and not only those that are distinctly and demonstrably nervous, but others also, such as gout and rheumatism, that have not been often regarded as neuroses.

Neurasthenia is as jealous as a woman ; it allows no rival ; when it has obtained possession, when it is thoroughly intrenched in any constitution, it succeeds in holding its position against all attacks of rival diseases ; he who has this disease finds it hard to have anything else ; hence the sufferers from it look so young and live so long ; diseases that kill cannot gain entrance ; neurasthenia, in short, illustrates in its course and history the truth of the maxim I have elsewhere laid down, that diseases prevent diseases, diseases cure diseases, diseases are antidotes to diseases.

If any other disease does succeed in gaining partial possession of a neurasthenic sufferer, its history and conduct are modified all through, and controlled, in a measure, by the neurasthenia, just as happens so often, as every one knows,

with malaria in malarious regions; as all diseases of malarial persons may take a periodic character, so all diseases of neurasthenic persons may take a neurasthenic character; syphilis is milder, inflammations less furious and less fatal; neurasthenics may take colds, and take them often, but they take them mildly; they are not killing colds; they go through fevers, epidemics, plagues, oftentimes untouched, for nervous exhaustion vaccinates the system against febrile and inflammatory diseases. Often such patients say that they have never been sick, that they have never lost a day in bed; it is because they have always been sick that they are never sick; their sickness in one direction keeps them from being sick in any other direction; disease itself is the most powerful of doctors.

Malaria.—One of the great afflictions of America—malaria—often complicates neurasthenia; aggravates it, makes it harder to treat, masks and confuses its symptoms; the two diseases not only exist together, but may be mistaken for each other. Not a few of my cases have the diagnosis of malaria made before I see them, and as they do not improve to a marked degree under quinine and the ordinary antimalarial treatment, they become discouraged. When malaria does occur as a complication—as it is likely to do—we have to treat it as a complication; but on the disappearance of the malaria

we do not find a disappearance, or necessarily a positive improvement, of the neurasthenia.

Syphilis.—Syphilis is sometimes a complication of neurasthenia, but not very often a chief cause, although it may and does cause, in some persons, a variety of neurasthenic symptoms. A minority only of my patients have a syphilitic history, and when that history is clearly established there are often sufficient other causes, without the syphilis, to explain all their sufferings. Of this fact I am persuaded, and it is one to which I believe attention is not often called, that in this form syphilis is not so likely to run a peculiar, violent course as in those who are moderately strong.

I am not sure but that syphilis may, like many other diseases, act as a preventive or counter-irritant or mild antidote to neurasthenia; but much will depend on the constitution of the sufferer.

Syphilis is undoubtedly growing milder with civilization. It is a law of the system, elsewhere stated by me in various places and under different heads, that strong constitutions resist disease better than weak, and, by virtue of that resistance, are more liable to organic or structural disease of an incurable character. It is probable, if not absolutely demonstrable, that the nervous constitution of modern times interposes so little resistance to the syphilis that the manifes-

tations are more mild than formerly. This, at least, is my explanation of the fact, to which the best experts in different departments now agree, that syphilis is, comparatively speaking, a disease persistent in its character, hard to eradicate, even by the best treatment, but still, comparatively to what it was reported to have been in the middle ages, and, in fact, the last century, a mild affection, accompanied with far less inflammatory disturbance, with less ulceration—in short, with far less of the horrible about it than all the authorities of the past used to attribute to this affection. My friend, Dr. C. L. Dana, of this city, has written a paper on "The Benignity of Syphilis," which is based on very considerable study and worthy of much consideration.

RELATION TO CYSTITIS.—Inflammation of the bladder does not take place in cases of sexual neurasthenia in either sex as often as would be expected; in fact, it occurs very rarely with them. They do not seem to be strong enough to get up an old-fashioned bladder inflammation; the irritation of the prostate, which has resisted for years and years the passage of instruments, does not excite sympathetically, as one would suppose, an inflammatory state of the bladder. The only exceptions which I have seen to this rule have been in those strong constitutions, and in those where the neurasthenia was of a local

character, but slightly affecting the patient's system.

Relation to Organic Diseases.—This department of the subject is considered so thoroughly in one of the chapters of my work on neurasthenia that I will here refer to that chapter rather than attempt to go over this whole question again. To what is said there I can add here but very little. It is one of the most important questions that is presented to a medical man, this differentiation between organic or structural and functional diseases of the nervous system ; for example, neurasthenia in any of its varieties and locomotor ataxy, or progressive muscular atrophy, or progressive paresis, or softening of the brain, or clot on the brain, etc., etc., etc. The four tests which I have laid down in my work on neurasthenia by which to differentiate organic from functional diseases have stood the test of time and immense experience, and will be satisfactory, I am sure, to all who apply them. I maintain that it is possible in every case where all the facts can be obtained to distinguish between functional and organic nerve trouble, and to give a prognosis based thereon which the future shall confirm absolutely. It is not easy to do this ; it cannot be done by five minutes' talk ; it cannot be done by asking a few simple questions and sending the patient away ; but it can be done by prolonged interviews, by

repeated interviews, and by thorough, careful, systematic, and scientific study of the patient by all known means of diagnosis. I keep watch of my patients frequently for years after they have passed out of my hands, and have opportunities to determine whether a diagnosis is confirmed by the facts or not.

When the first edition of my work on neurasthenia appeared, I stated that I was frequently consulted by physicians and others with neurasthenia in different varieties, who firmly believed that they had organic disease, especially ataxy, and that I had the pleasure in very many cases of showing them clearly that they had no such disease, and would probably live to bury their doctor, however much they might suffer in the mean time. Since the publication of that work I have seen very many more of such cases. A notable case was communicated to me recently by my former associate, Dr. A. D. Rockwell, of this city. A clergyman of wide fame and intense activity consulted him for a supposed organic disease of the spinal cord (locomotor ataxy). This diagnosis had been made by a practitioner of excellent repute, who gave him but a short time to accomplish the work appointed unto him to do. The result was, of course, utter demoralization on the part of the patient, who immediately took steps pointing to a permanent resignation of all clerical duties.

Examination revealed the fact that although the patient was suffering from some of the symptoms of ataxia, yet the grouping of symptoms indicated clearly enough only functional nerve disorder. The patient was given the assurance that he had not the *slightest evidence* of organic disease, and that he might go on with his labors. Time has proven the correctness of this diagnosis, for from that time he gradually improved, and has for many months performed with perfect ease the many duties pertaining to his position. I have observed, however, that as a result of what has been written on the subject by myself and others during the last two or three years, there has been some reaction and mistakes made the other way—that is, cases of real organic disease, of ataxy, and even serious diseases of the brain, are diagnosed as neurasthenia. This now exceedingly popular term has been over-used, made to bear burdens too heavy for it; it has become the hiding-place of malaria, of syphilis, and of different forms of insanity, as well as of hysteria and the like. I have lately been consulted, while this chapter was in course of preparation, by a man who has been under the care of the most excellent and able physicians—for whose opinion I have great respect, and in whose hands I would be pleased to place myself if I were sick—who has got ataxy, who has all the symptoms of ataxy, and has had for years,

but who was told by his physicians that he had only neurasthenia. In this case the two conditions were blended somewhat—a thing which does not occur very often—which made the diagnosis somewhat difficult, but absolutely certain after full inquiry. It was one of the unpleasantest things I have ever performed to tell that man the truth in regard to his condition. In the famous case of Henry Prouse Cooper, where the diagnosis was made by myself and others, of progressive paresis of the insane, when the case appeared in court, before a sheriff's jury, it was found, to the amusement and horror of all of us interested in the matter, that one or two physicians testified, in opposition, that the man was suffering simply from neurasthenia.

Relation to Constipation.—Some of these cases, for example, are better when they are constipated. Many patients independently have spoken to me of this. The explanation is two-fold.

First: A passage from the bowels acts reflexly on the whole system, through the nerves that supply the lower bowel and also the intestines. In cases of great debility a passage of the bowels, or a series of passages, causes, as all know, exhaustion and faintness; and where exhaustion is profound in any disease, it is necessary, oftentimes, to avoid all irritation in this way, whether through medical or mechanical means.

Secondly: Pressure of the fæcal matter on the prostate urethra in man, or the uterus in woman, when those organs are in an irritable condition, irritates the whole body; and thus I explain the fact that, although costiveness is not a sign of health, but rather of impaired action of the nervous system, yet many of these cases are better when constipated, and clearly worse when the bowels are loose from any cause. In one of my cases of sick-headache a passage of the bowels always brought on an attack.

Relation to Hypochondriasis.—In the majority of cases where trouble with the genital system is suspected by patients, some form of trouble does exist. It may not be what the patient suspects, it may not be so grave as he has fancied, but there is usually something abnormal that requires treatment or hygiene; and there is also need of sound instruction on the whole subject of the management of this function. There is, according to my observation and experience, far more of hypochondria (that is, groundless fear of disease) in regard to the heart than in regard to the reproductive system. A woman may be mistaken in suspecting that all is not right with the womb, but in the majority of instances of suspected difficulty of that organ there is some disorder, either of that or of some other part of the reproductive apparatus; while there are very many women who remain long invalids

from uterine or ovarian trouble without the fact ever being suggested by herself or by her adviser. In men, as in women, the removal through treatment and hygiene of the real disease of the genital system removes the morbid fear of disease that does not exist.

Few terms are so often misused in medicine as hypochondria. It is applied to almost any symptom complained of by a patient, and doubted or misunderstood by the physician. It certainly would not be improper to call for a definition of this over-used term.

Hypochondria, strictly analyzed, is *groundless fear of disease;* and when the word is used by physicians it is to convey the idea that the disease of which the patient complains does not exist in his case, and that his fear that it does exist, or that it may exist, has no foundation outside of his own fancy.

Thus analyzed, hypochondria is really one of the many phases of morbid fear, and, like other morbid fears, is a symptom of nervous disease, but not a disease itself, although for convenience' sake we call it such. This is true hypochondria or pathophobia, a term justifiable and necessary, and well applicable to many cases; *but it is a malady far less frequent than is supposed*—not so frequent as many other morbid fears.

The term is constantly and roughly applied to cases of real, positive, and demonstrable disease,

especially functional nervous disease—a sort of waste-basket into which we throw every case that is not described in the books. Symptoms that our senses cannot appreciate, that cannot be seen or heard or touched, and for the existence of which we depend either on the patient's statements or on examinations of the urethra or of the urine, that are not usually made, are referred to hypochondria.

A young man, twenty-three years of age, began the habit of masturbation at the age of seventeen, which had never been remarkably excessive. The chief symptoms at the time when he first consulted me were palpitation, morbid fear, and aversion to society. On examination the prepuce was found to be elongated, and the lips of the meatus were red and swollen, as is so often observed in disorders of the prostatic urethra. The patient was in other respects well, very strong and muscular, capable of hard and long work at his trade, which was that of an engraver. The functions of sleep and digestion also were normal.

In this case two facts were clear and demonstrable :

1. That he feared disease more than he experienced it. He stated to me in deep earnestness that until he saw me he had supposed that he was the worst case in the world, and it was hard for him to believe me when I assured him that his was really one of the mildest cases that I had

seen for a long time. This, however, was not true but false hypochondria.

2. The case is a sample of many persons who are not well, who are truly sufferers from demonstrable though little understood nervous disease, but who, through ignorance purely, add to their real disease a hypochondriasis which is removed at once as soon as they obtain correct information. Such patients are in the condition of a man who has fallen and injured an arm, but fears that a fracture has occurred, until the surgeon appears and makes a clear diagnosis of simple sprain. In strictness this is not hypochondriasis at all. It is the just and inevitable apprehension of ignorance—an intellectual rather than an emotional trouble—and is removed by appealing to the intellect—that is, by informing the patient as to the facts. True hypochondriasis, on the other hand, pathophobia (fear of disease), like morbid fear of all kinds, cannot be removed by instructing the patient in the matter. He knows as well as we that his fear is baseless, and he desires to get rid of it, but is powerless to do so until his exhausted nervous system, of which the morbid fear is a sign and symptom, is calmed and strengthened. Real hypochondriasis, or morbid fear of disease, is rarely or never cured by simply giving the patient authoritative information that there is no ground for his fear. The experiment has been tried for ages by the

ablest physicians of the world, and it never succeeds and never can succeed. A genuine hypochondriac may cross the continent and all the oceans to consult some famed physician, so great is his confidence in him ; but when, on obtaining the interview, he is told that the disease from which he supposes himself to be a victim does not exist in his case, his morbid fear remains unchanged, he is still pathophobic, and very likely goes around consulting physician after physician. In this respect hypochondria is quite analogous to the delusions of the insane ; they cannot be corrected by the direct evidence of the senses nor by any process of reasoning ; nothing can remove them but the removal of the disease on which they depend and of which they are the results.

The two phases, intellectual and emotional fear of disease, may coexist, one form passing into the other. The not being able to rightly diagnosticate intellectual fear from emotional fear of disease is the basis of much unfortunate advice given by good physicians to sufferers of this class. In the above case there was real objective disease at the basis of the intellectual fear of disease. There was local irritation in the prostatic urethra, induced by his evil habit, and revealed by examination and indicated by symptoms.

In the majority of cases of so-called hypo-

chondriasis there is some real and demonstrable disease at the basis of the mental trouble, and which can always be found if we but look closely and examine into the condition of every part and organ; the term hypochondriasis being quite often a cover for our lack of thoroughness in examination. Very rarely indeed do I see a case of morbid fear of disease where the urine, or the liver, or the stomach, or the prostatic urethra are in health. *In some instances, no doubt, the demonstrable physical disease may be, in part, the result of the mental disease, mind acting injuriously on body, and exciting lesions that can be appreciated by the senses; but in all such cases the physical malady needs and should receive treatment* just as if caused in any other way.

ACTION OF MIND ON BODY.—The action of the mind on the body in health and in disease is a subject of the highest interest and importance, but scientific men are only just beginning to study it. There is not here space to do anything more than call attention to these points.

1. The success of charlatans of various kinds, clairvoyants, and so forth, is largely due to the fact that the patients have great faith in them, and so cure themselves unconsciously through mind acting on the body, and bringing about the results they expect. This is the answer to those who report the great cures wrought by ignorant pretenders, and absurd methods of treatment.

2. Modern delusions—as animal magnetism, spiritualism, clairvoyance, and mind-reading, owe their strength and popularity to the fact that people do not understand the physiology of the mind and its relations to the body. The subject, however, is now sufficiently understood by experts in this department to explain in full detail all that is really accomplished by mesmerizers, mediums, second-sight performers, and mind-readers. The subject can only be studied successfully by specialists, who must give years to the investigation.

A few years ago I made a systematic series of experiments in one of the public institutions of New York, in order to determine, as accurately as possible, how far it is possible to cure disease by mental influence alone.

In these experiments, which were kept up for many weeks, no medicine of any *real* value was used, but simply what are called *placebos*, to act upon the minds of the patients, and induce them to believe that they were taking or doing something that would surely cure them. A favorite device was to tell the patients that they would get well on a certain day and hour. I would say, "Take this, and you will be well on Thursday afternoon at three o'clock." "Take a drop of this mixture just as you are half through dinner, and in half an hour your pain will leave you." In the majority of the cases—though not, of course,

in all these predictions were literally fulfilled. The patients did get well on the time appointed, and many and profuse were the thanks that I received for my success.

In these experiments were proved absolutely, and beyond all question, that it was possible to relieve in this way, not only imaginary functional troubles, but also genuine and organic diseases, although the results were more certain and more permanent in functional than in organic disease. It had previously been denied by physicians that organic diseases could be affected through the mind.

What astonished me most was the permanency of the cures in many of the cases. They not only got better, but they kept better, and, in some instances, recovered entirely. I call this treatment *mental therapeutics.*

When the reports of these experiments are published in detail, it will be seen that there is no mystery about the great success of travelling pretenders, or of many unscientific systems of treatment. *What patients confidently expect to happen will be very likely to happen.*

Diseases may be *brought on* as well as cured by mental influence. In great epidemics, like cholera and yellow fever, many are scared into the symptoms, and, when attacked, are made worse by worry, and oftentimes die, when, so far as can be seen, they might live. I have, in a number

of instances, seen negroes die from various forms of disease when there was not the slightest necessity of their so doing.

I was once consulted by a physician in regard to a patient of which the following history is given: He is twenty-four years of age; has masturbated by intervals for several years, but not to very great excess. He has had nocturnal emissions for over two years, sometimes several times a night. He has lately fallen in love, and sought medical advice in regard to breaking up his habit, but was repelled by a number of physicians who made light of his history, until he fell into the hands of the gentleman who consulted me about him. His present symptoms are severe insomnia, one or two wet dreams every night, indigestion, extreme nervousness approximating to hysteria, and a demented look.

If this man is not sick, then there is no such state as sickness; if these symptoms are not pathological, then nothing is pathological. But hypochondria is the diagnosis most often given for all cases of this kind.

The late Dr. Bumstead, shortly before his death, wrote a chapter on Sexual Hypochondriasis, which represented many of the symptoms of sexual neurasthenia as portrayed in the work as imaginary symptoms existing only in the mind of the patient, with no objective existence. This essay is noticed here because it

represented, at the time of its publication, the almost unanimous opinion of the medical and surgical world. It also represented the prevalent medical inconsistency on this subject, since it recommended prescriptions of active medicines for diseases which were supposed to have no existence.

Relation to Insanity in General.—Sexual neurasthenia does not, as a rule, lead to insanity ; more frequently it saves its victims from insanity, as it saves them from inebriety and epilepsy. But long kept up, masturbation, acting on strong constitutions, does cause insanity, usually of the form classed under melancholia, in quite a proportion of the cases that enter our asylums. This is a subject on which opinions the very extreme have been and are expressed. It is said that masturbation never causes insanity ; it is said that it causes a very large proportion of cases ; neither statement is quite true. When the constitution is originally strong, so that the boy can bear the habit without the warning effects on the nervous system that the sensitive feel, and it is kept up year after year, insanity may follow. In one of my own cases, where the operation of circumcision was employed and with various treatment, the victim kept up his habit until he was near the borders of insanity, and where both his father and myself expected that he would pass over the borders and remain there

until he died. I have not heard whether our expectation was fulfilled, but I presume that it must have been, or in time will be. All the above is inconsistent in no wise with the well-known fact that in asylums masturbation is an effect as well as cause of insanity ; that in this respect, as in all other respects, the tendency of insanity is to sweep away a moral sense and self-respect, and leave its victim an animal, and that one of the manifestations of this unchecked animalism is indulgence in this unnatural form ; and that it is hard to differentiate, to tell just whether the furious excitation of the passions on the part of the insane is the result purely or a cause purely, or whether it stands, as it often does, in a double relation to insanity. In extreme cases, however, neurasthenia develops into insanity, and usually of the form known as *melancholia*. I have in some instances seen patients pass over the border while under observation, all efforts to save them being fruitless.

A certain proportion of the cases of melancholia in our asylums have been neurasthenics, and some of them, when they recover their reason, do not recover their full nerve force, but go back to neurasthenia, from which condition they may again, under exciting influences, make forays into the dark and terrible regions of the insane.

In other cases proper treatment has saved neurasthenics from becoming crazy ; in helping the

physical condition we have also arrested the direst of mental disorders.

Some neurasthenics have a morbid fear of becoming insane ; like other morbid fears—detailed in my work on Neurasthenia, and in the chapter on Symptoms of the present work—this fear is the result of the exhausted state of the nervous system, and does not show any important prophetic significance, although in some cases possibly the fear may be fulfilled and perhaps aid in its fulfilment.

Border-liners.—In a recent series of essays in the New York *Medical Record*, on monohypochondria and monomania, I applied this term — border-liners — to that very large class of nervous persons—sometimes hypochondriacal, sometimes neurasthenic, sometimes hysterical, sometimes epileptic, sometimes inebriate, sometimes several of these united—who are almost insane at times, or all the time, and yet who never really become insane ; whose mental responsibility is impaired by disease, more or less, but not seriously enough impaired to justify at any time the diagnosis of insanity, but who are usually able at most times, if not at all times, to maintain a measure of respect and good sense in their relations to the external world, and who are never driven by their disease to any kind of crime, though they may and do very often, indeed, cause life-long distress to their relatives,

dependents, and friends. These neurasthenics very often become border-liners; they come so near to the border that the question arises frequently whether they have not crossed it; whether restraint is not needed; whether their mental responsibility is not impaired so as to require separation from home and friends; but, as a rule, the worst cases of this kind—and I see the very worst cases possible—do not cross the border line, although they may do so; and that possibility is to be considered in extreme cases; for I have seen them take that last step right before my eyes, while I was doing my best to prevent them. This irritability, petulance, unreasonableness, impatience, uncertainty of conduct, with great depression, tending downward toward melancholia, that these patients show so often, so profoundly, so painfully, all suggest insanity, but they are not usually symptoms of insanity. They may talk of suicide, they may talk of murder, but they do not usually commit suicide, and never commit murder, unless, perchance, they be naturally murderers; and usually they are sane enough to make contracts and to keep an oversight of business, and well enough, despite their disease, to control their impulses, though they do not, oftentimes, control their morbid fears. Thus they do not respond to the tests of insanity, but rather to the tests of sanity. As I have elsewhere pointed out, their instinct of self-preserva-

tion is not seriously impaired, though it may be more or less impaired ; they have yet a reasonable power of adapting themselves to their surroundings ; their moral nature, though disturbed, does not indicate a return to childhood, animalism, or savagery, as with the insane ; and their memory, though uncertain and capricious, does not exhibit that enormous defect that is seen in insanity.

All diseases affect the intellectual and moral nature ; the sick man can never be the same in thought or feeling as the well man ; the remark of Dr. Johnson, "Every man is a rascal as soon as he is sick," is, with a flexible and generous definition of the rough word rascal, true, without any possible or conceivable exception. While this is true of all diseases in all stages, its truth seems to be more readily and more positively shown in nervous maladies. Neurasthenia is a demoralizing disease, producing irritability, pettishness, unreasonableness.

Relation to Nymphomania, Erotomania, and Satyriasis.—Nymphomania is a physical condition, with the symptoms of maniacal excitation, spasms excited by the sight of a man or by external irritation—sometimes of any part of the body. It is accompanied by obscene language and conduct, which are in perfect contrast with the character of the person in health; as also, sometimes, a disposition to suicide.

Erotomania is a mental state, in which the

victim is exclusively occupied by the object of her thoughts ; there are illusions, hallucinations, and the patient has no full appreciation of her condition. Nymphomania is physical ; erotomania is mental, psychical.

Satyriasis is peculiar to the male sex. Its symptoms are hallucinations, paroxysms of sexual furor at the sight of women or sometimes of animals ; repeated ejaculations ; obscene conduct and words, and a tendency toward suicide. Satyriasis is to man what nymphomania is to woman.* These desires, though not necessarily, usually depend on sexual neurasthenia, although they may be in some degree and in some cases complicated with it ; they are all of them more mental than purely physical conditions, and do not usually arise from simple nervous debility in most sensitive persons ; they are more likely to occur in those who are moderately strong, who are—to use a term often used here—half way between the strength of the very strong and the weakness of the extremely weak. Satyriasis and nymphomania correspond very well to monomania, to inebriety, to mental hysteria, as it occurs in the strong and vigorous. Sexual neurasthenia very rarely goes on to these conditions, although I do not deny that in some cases it may do so.

* "Des Aberrations du Sens Génésiques," par le de Paul Moreau (de Tours), p. 272.

RELATION TO THE DISEASE OF THE SCYTHIANS; SEXUAL PERVERSION.—This name is given to a disease which has been known from remote times. A general description of it is given by Moreau in "Des Aberrations du Sens Génésiques," par le de Paul Moreau (de Tours), pages 95–97. He refers to a previous work on the subject by Montyet. In the Caucasus there are individuals who lose the attributes of virility before old age; their beard falls off; their genital organs atrophy; their amorous desires disappear; their voice becomes feeble; their body loses its force and energy, and at last they come to a condition where they partake of feminine costume, and assimilate to women in many of their occupations. The disease has been described both by Herodotus and Hippocrates. According to Herodotus the disease was a punishment upon the Scythians for pillaging the temple at Ascalon. Hippocrates says that these impotent Scythians were called Anandrii, and he says that the disease was excited by excessive riding on horseback. According to Allemand, the disease is caused by seminal emissions produced by horseback-riding. Moreau, just cited, refers to Esquirol, Morel, Moreau (de Tours), Luys, Azam, etc. Dr. Hammond, in a recent paper on this subject, delivered before the American Neurological Association,* states that in

* *American Journal of Neurology and Psychiatry*, August, 1882.

New Mexico, among the Pcublo Indians, who are the descendants of the Aztecs, there exist what are called "Mujerados," which means, literally, "womaned," or feminine. These Mujerados have protuberant abdomens, well-developed mammary glands, rounded and soft limbs, shrunken genital organs, high, thin, cracked voices, and pubes devoid of hair. Dr. Hammond describes two cases to whom this description is applied, although one did not have any unusual development of the mammary glands. One had been a Mujerado for seven and the other for ten years; both dressed like women, and one appeared like a woman, both dressed and undressed. A Mujerado is found, he asserts, in every Pueblo tribe, and is an important person in the religious ceremonies, which are conducted very secretly in the spring. In order to make a Mujerado a very strong man is selected; masturbation is performed upon him many times a day; he has to ride almost continuously on horseback without saddle. By this process the genital organs become much excited, and seminal losses are produced; the nutrition of the organs is interfered with; they grow smaller and weaker, and, in time, desire and power cease; then follow the changes in character, the desire to dress like a woman and to engage in feminine occupations, just as with the Scythians; courage and manhood are lost; wives and children, for

those who have them, pass from their control. The Mujerado is held in honor, although men do not associate with him—only women. The only difference between these Mujerados and the Anandrii of the Scythians is, that in the case of the Scythians the condition is brought on accidentally, as a result of excessive horseback-riding, while in the case of the Indians it is brought on intentionally for religious purposes ; the philosophy in both cases being the same—excessive equitation following masturbation ; masturbation bringing on an unnaturally excitable condition of the parts and preparing them for involuntary emissions after excessive horseback-riding.

The general term, "sexual perversion," of which Dr. Spitzka speaks in an article on Lord Cornbury, may be used to cover a number of abnormal mental conditions connected with the genital system ; but I see no need, practically, in describing any of these cases, to use any other term than this one, "sexual perversion."

Cases of sexual perversion are very much more frequent than is supposed ; but they are very rarely studied by scientific men, and only in exceptional cases do they consult scientific men. This class of people do not wish to get well. They are content with their lot, like the majority of opium-eaters and inebriates, and have no occasion to go to a physician ; they enjoy their ab-

normal life, or, if they do not enjoy it, are at least not sufficiently annoyed by it, or are too ashamed of it to attempt any treatment. There are, as I have recently learned on inquiry, great numbers of such cases in the city of New York. To say all that might be said in regard to them would not add anything of importance, perhaps, to our scientific knowledge of the subject ; a few cases will answer quite sufficiently for all the purposes of science.

I was at one time consulted by a man whose constant desire was to attain sexual gratification, not in the normal way or by masturbation, but by performing the masturbating act on some other person, and, in his case, it had become a mania practically, so that he was a great sufferer, and very earnestly sought relief. The patient had a number of symptoms of nervous trouble, of which this, on which he specially sought advice, was one. I saw the patient but once, and do not know the result of the plan of treatment proposed. In this case there was a combination of mental and physical infirmities. I am persuaded that a nervous constitution and excessive nervous susceptibility going on to debility, tend to induce the habit of "mental masturbation," as well as both natural and unnatural excess in sexual indulgence. The strong, the phlegmatic, the healthy, the well-balanced temperaments—those who live out-doors and work with the

muscle more than with the mind—are not tormented with sexual desire to the same degree or in the same way as the hysterical, the sensitive, the nervous—those who live in-doors and use mind much and muscle very little. Dr. Boteler, who has had much experience as a physician among the North American Indians, tells me that Indian boys do not masturbate, and do not, as a rule, in most of the tribes, commit excesses in sexual indulgence prior to marriage ; and it is quite safe to assume, reasoning deductively and inductively from a general knowledge of the nervous, from observation among savages and semi-savages, among the negroes and among the strong, healthy farming population in all civilized countries, that those who live out-doors and have well-balanced constitutions of the old-fashioned sort are not annoyed by sexual desire when they have no opportunities for gratification, nor to the same degree as the delicate, finely-organized lads of our cities and of the higher civilization.

Of the unnatural forms of coitus, the habit of premature withdrawal undoubtedly is the worst ; but even that is practised by some persons for years without any apparent injury, although in the case of the sensitive, the nervous, and the weak, injury of a demonstrable character will result, provided the habit be carried to any great extent. Injuries that come from these bad habits are of a functional rather than a structural char-

acter, and are relievable and recoverable, as a rule, by time and treatment; and this is one of the redeeming facts connected with these unfortunate habits.

Under this head of sexual perversion there are, however, two necessary subdivisions: *First:* those who are insane, who have the insane delusion—*i.e.*, the delusion that cannot be corrected by the direct evidence of the senses, the delusion that they are women, and who correspondingly assume the manners, the dress, and the customs of women so far as they are able to do. This is simply a monomania, a positive insanity, and of a serious and usually incurable kind; and it is quite different, essentially, radically, from the following class of cases:

Secondly: those, like the Scythians and the Mujerados and the cases described by Ulrichs, whose sexual instincts are perverted, but who understand that perversion perfectly; who are not under the influence of any delusion, and who are not, in any true sense of the word, insane. This latter class—those who are not insane, but yet who have a sexual perversion as a disease, without any delusion, and without sufficient impairment of will-power to make the diagnosis of insanity possible—may be divided into two classes: first, those who inherit this tendency or who come into possession of it as soon as the sexual passion appears, or before; second-

ly, those who acquire this condition as one of the symptoms of sexual debility. In both classes there may be very many symptoms of a nervous impairment. It is quite possible that in some of the cases where there is no delusion—where the man perfectly well knows that he is a man, not a woman, though he dresses as a woman and partakes of feminine occupations—there yet may be sufficient destruction or impairment of will-power to make the diagnosis of insanity possible, just as in some of the worst cases of inebriety or of opium-eating and the like ; but in the majority of cases the impairment of will-power is not sufficient to bring these patients under the head of insanity. In this respect, as in the case of inebriety, as in the case of morphia-taking, each case must be studied by itself ; and when any cases of this kind come into court, they must be considered by themselves.

Psychology of Sexual Perversion.—When the prime conductor of an electrical machine is fully charged with positive electricity, it tends to discharge itself in proportion to the tension of the electricity ; and the electricity upon it seeks for its opposite, the negative electricity, to equalize itself. A wave of the sea, thrown up by the wind, tends to fall more and more in proportion to its height, in obedience to the law of gravity ; and when it falls it leaves a trough in the sea in its place. These physical facts suggest a law

which runs through all nature, which the inanimate as well as animate world obeys : reaction follows action, and as a necessary result of action ; violent and excessive exercise of any function finds relief only in the opposite condition—in perversion. Dyspepsia, brought on by excess in eating, shows itself sometimes by a craving for the most loathsome and disagreeable things, as is seen in chlorosis and hysteria ; exhaustion of the sexual organs, through excess or masturbation, brings on at first indifference to the opposite sex, then positive fear or dread of normal intercourse ; confirmed, long-standing masturbators of either sex care little or not at all for the opposite sex ; are more likely to fear than to enjoy their presence, and are especially terrified by the thought of sexual connection ; similarly, excess in a normal way tends to make us hate the partners in our excess ; the unhappiest marriages are those where there is the greatest indulgence ; irritability, aversion, positive hatred and disgust toward the object of our former love follow protracted debauches. The subjects of these excesses go through the stages of indifference and of fear, and complete the circle ; the sex is perverted ; they hate the opposite sex, and love their own ; men become women, and women men, in their tastes, conduct, character, feelings, and behavior. Such, as appears to me, is the psychology of sexual perversion, whenever and

wherever found. When the sexual debility becomes organized in families, then children may be born with this tendency ; hence the congenital cases of sexual perversion as before described. These cases of complete sexual perversion are far more common than is believed ; but the half-way cases, those who are in the stages of indifference and dread of the opposite sex, are very numerous ; we see them every day.

RELATION TO EPILEPSY.—Many patients with sexual neurasthenia appear to be epileptic ; they have, as I have said, the mobile and dilated pupils sometimes seen in epilepsy, and they often fear they are going to have epilepsy ; but they are saved from epilepsy by their very disease. Epilepsy is one of the half-way diseases between perfect strength and perfect weakness of the nerves : the very strong do not have it, the very weak cannot have it until they get stronger. Epilepsy attacks those who have fairly strong, though it may be degenerated, constitutions ; not the most exhausted, but the moderately exhausted ; even petit mal. is not the disease of neurasthenics ; for although there appears to be a border line between neurasthenia on the one hand and the mildest and subtlest phases of epilepsy on the other, yet this border line is a very wide one—so wide, indeed, as to keep the diseases very far apart. Neurasthenia in the extreme does not lead to epilepsy, as a rule, if in-

deed it ever does, directly or indirectly ; epileptics belong to a different order of constitution—to the half-wayites rather than to the more sensitive class. Epilepsy, like some of the worst forms of insanity, is a very old affection, and it was recognized centuries ago, even thousands of years ago, before neurasthenia was recognized, or before it existed. It occurs among strong people—those who are moderately strong, but most nervous or in a high degree developed—among savages and semi-savages, among the civilized and in the semi-civilized ages, long before a high civilization had brought into being the nerve sensitiveness of which neurasthenia is the most important and extreme expression.

Sick-headache, some suppose, is related to epilepsy ; but experience shows that it saves from epilepsy, just as it saves us from many other diseases ; it is a safety-valve through which, if confined, might result epilepsy, paralysis, insanity, or some disease more fatal if not more distressing than sick-headache itself. I have never known a case of sick-headache to develop into epilepsy ; and the majority of epileptic patients do not give a history of sick-headache, although there may have been cases of real sick-headache among their relatives.

Relation to Neuralgia.—Sexual neurasthenics are usually too weak to have neuralgia. Neuralgia, like gout, requires a certain degree

of strength in the constitution, more than neurasthenics usually have ; although to this rule there are exceptions. But it is a very instructive and important fact, which those who have studied these subjects in the way pointed out in this work will confirm without fail, that neurasthenics of the class portrayed do not very often suffer from tic douleureux, gastralgia, or facial neuralgia, nor, indeed, with powerful localized pains anywhere ; and for this reason, that they are too weak to suffer in this way, and there is not in the system sufficient resistance to accumulate nerve perturbation of a quality and kind that belong to positive and persistent neuralgia; vague, diffused, flying pains and sensations that are *like* neuralgia, and are called neuralgia, and are almost neuralgia, these patients have abundantly and terribly ; but not neuralgia itself, as commonly defined, and as commonly and properly understood. Sufferers from tic douleureux and sciatica are usually comparatively strong ; not perfectly so, but, like inebriates, half way between the extremely strong.

Relation to Hay Fever.—Hay fever is a nervous disease, as I have pointed out in my work on the subject, and as I have also stated in histories of cases, and is associated with and co-related to a large number of functional diseases. A great and important fraction of my cases of hay fever has an extra gift thrown in to supple-

ment their other sorrows. Some of them are better when hay fever is upon them in the summer and fall ; but others are tortured, as a result, during the autumn.

A family history of hay fever in some of the branches is sometimes found. Hay fever is a disease which occurs in all kinds of nervous diseases ; in the half-wayites, those who would be likely to have neuralgia as well as some of the worst forms of nervous exhaustion, but always in the nervous temperaments.

Relation to Inebriety.—All the forms of nervous exhaustion prepare the way for inebriety—that is, all the clinical varieties of that condition heretofore described may lead to or be associated with, or in part result from, inebriety. But the nervous disease inebriety, from the milder forms through the severer phases—that is, dipsomania—belongs to this list of half-way diseases ; it comes from nerve degeneration, but not from the extremer phases of nervous exhaustion ; one must have been moderately strong to be an inebriate.

Relation to Rheumatism and Rheumatic Gout.—Many of the class of patients described in this work and in all my writings on the nervous system, when they consult European physicians, especially English physicians, get a diagnosis of suppressed or latent gout ; indeed, that disease is quite as fashionable in London as neu-

rasthenia is in New York, and the same patients are credited with both, according to the doctor they consult. I have seen patients with cerebral exhaustion, with digestive exhaustion, with epilepsy, for whom, in London, by physicians the most eminent, the diagnosis of suppressed or latent gout has been given.

When we consider that almost all neurasthenics have or are pretty likely to have what is called lithæmia and oxaluria; and when it is fully considered that gout itself, when it infests the joints in the old-fashioned form, is depending on the state of the liver, it is easy to understand that this diagnosis might be given by those who hold the views of Dr. Murchison on lithæmia. Philosophically stated, the diagnosis is not so entirely out of the way as it might be supposed to be—that is, it is nearer the truth than those who make the diagnosis suppose it to be. By this I mean that there is, in those terms latent, suppressed gout, a suspicion or fraction of truth, as applied to some of the symptoms of gout in these cases; beyond that the diagnosis is, of course, a delusion. The truth is, that gout is a disease of the strong, neurasthenia is a disease of the weak; and those nervous influences which in a strong person would cause gout, rheumatism, or rheumatic gout, acting on a very nervous, sensitive person would bring on gout, with or without lithæmia or oxaluria as a result.

Gout is to Europe what neurasthenia is to America—the national chronic disease. Both diseases exist in both countries, but gout is more prevalent in Europe, because Europeans are stronger than Americans; neurasthenia is more prevalent in America, because Americans are weaker and more nervous than Europeans; the majority of our brain-workers are too nervous, too sensitive, and too weak to acquire gout. With the progress of civilization and the correlative increase of nervous sensitiveness, gout is declining in frequency in Europe, as well as in America; so that it seems destined to become, in time, almost an historic disease. In America the disease is comparatively rare, and is, indeed, as much of a curiosity to-day as was neurasthenia a century ago. To a less degree, all the above propositions apply to rheumatism and rheumatic gout, both of which diseases are not likely to exist in a neurasthenic sufferer, although in some cases they may do so; but when they do appear they are likely to take the place of the nervous symptoms.

I was once spending an evening in the family of a very eminent American theologian, who had at one time been under my professional care. He showed me his hands, and pointed out the enlarged joints of mild rheumatic gout, and said he felt better, as the joints had been enlarging.

Relation to Lithæmia or Uricæmia.—

Under the head of "Lithæmia," Dr. Murchison describes a functional disease of the liver in which there is an excess of lithic acid in the urine. Previously, Dr. Austin Flint had produced the term uricæmia for a similar condition. Dr. Murchison's position is that gout is simply the result of lithæmia that is depending on the liver; also, urinary calculi, bilious calculi, various derangements of the organs of digestion, dyspepsia, constipation, bad taste in the mouth, coated, pallid, flabby tongue, hemorrhoids, pains in the region of the liver, jaundice, innumerable nervous symptoms which may be produced by this condition, aching pains in the limbs, burning or scalding patches, different kinds of neuralgia, sometimes in the region of the liver itself; cramps in the legs and abdomen, headache, vertigo, dimness of sight, double vision, specks before the eyes, convulsions, noises in the ears, depression of spirits, uricæmia and pleuritis. Of this long series of symptoms it is to be said that they do depend—some of them, in some cases, in a degree—on disease of the liver—that is, if the liver were perfectly well some of these symptoms, in some cases, might not occur; but the term lithæmia or uricæmia, like the terms phosphuria or oxaluria, express incidents rather than causes and the chief thing in the pathology and philosophy of the diseases with which they chance to be associ

ated. As Dr. Murchison allows and insists, the nervous system behind the secretory organs is to be assisted ; and when the nervous system is all right there is less likelihood of disturbance of the liver with the symptoms of excessive uric acid, oxalates, and phosphates. Lithæmia, indeed, belongs just where oxaluria, described by Bence Jones, belongs—that is, among the symptoms of digestive and nerve trouble ; for when they occur in neurasthenia they are to the neurasthenic condition what the twigs are to the branches, and not the branch itself. Many, if not the majority of cases of sexual neurasthenia, as well as digestive neurasthenia, are liable to have, for a part of the time, functional disturbance of the liver ; it is impossible that so important an organ as the liver should escape functional disturbance, and where, in connection with this functional disturbance of the liver, there appear oxalates and urates in excess in the urine, it is as unphilosophical to call the disease lithæmia, oxaluria, or phosphuria, as it is to call it spermatorrhœa when spermatozoa abound in the urine ; or to call it linitis because the ears roar ; or to call it amblyopia when there are attacks of dimness of vision ; or to call it catarrh when all the mucous membranes of the eye, the nose, the pharynx, the larynx, the intestines, the vagina, the urethra, the anus, and the rectum are in a condition of irritability and chronic inflammation.

The effect of treating lithæmia is to help these patients up to a certain point, but *only* up to a certain point; it leaves them—even when successfully carried out—just as sick and nervous; for the lithæmia is but an incident, a secondary form of their disease.

In the strong, the lethargic, and the gouty, the lithæmia is the main symptom, the leading, prominent feature of the disease. In some of the cases described by Dr. Murchison, lithæmia may be the great feature of the case, just as cerebral hyperæmia may be the great feature in some cases; so that the permanent relief of that condition, or rather of the condition of the liver and digestion of which the lithæmia is the expression or result, may be substantially a cure for the patient. But this is not true of neurasthenic patients who have lithæmia as an incident of their neurasthenia; for all or nearly all of them have lithæmia all the time or a part of the time, and none of them can be made well by a simple anti-lithæmic treatment.

This same method of reasoning applies to cerebral hyperæmia, hyperæsthesia of the eye, irritation of the prostate, of the ovaries, of the womb, etc.—they are incidents of the disease; they are not the disease itself; and, like spermatorrhœa, oxaluria, and phosphuria, they are to be treated as incidents of the disease rather than the main feature; as streams rather than sources of streams.

Relation to Kidney Diseases, Albuminuria or Bright's Disease.—Diseases of the kidneys are very much feared by neurasthenics; they look for Bright's disease—indeed, for every conceivable malady of the kidneys—and for the reason, mainly, that their symptoms are in the genital region, and they assume that disease there may light up disease in the same tract; but it is one of the facts of my observation that patients of this class, though they may have symptoms of the disease, nay, even have casts, yet they do not develop Bright's disease, and do not die of any structural disease of the kidneys, but rather are saved from the organic disease of the kidneys for the same reason, and in accordance with the reason that they are saved from epilepsy and some of the graver forms of insanity and neuralgia.

In those cases where there is found albumen in the urine, it disappears, and the patient does not develop any of the serious symptoms of Bright's disease.

I hold, therefore, that Bright's disease, in its different forms, belongs to the list of half-way diseases—that is, affects those who are not perfectly strong nor perfectly weak; who have a sufficient degree of health to keep from having nervous exhaustion, but not sufficient to keep from having a degenerated condition of the arteries or organs connected with the kidneys.

CHAPTER IV.

SEXUAL HYGIENE.

SEMINAL EMISSIONS THE EFFECTS AS WELL AS THE CAUSES OF DISEASE.—SELF-TREATMENT TO BE AVOIDED.—EFFECT OF SELF-ABUSE.—ACTS DIFFERENTLY WITH DIFFERENT CONSTITUTIONS.—FREQUENCY OF EMISSIONS CONSISTENT WITH HEALTH CANNOT BE DETERMINED BY MATHEMATICAL RULES.—INVOLUNTARY EMISSIONS IN THE MARRIED.—SEMINAL EMISSIONS TREATED BY A COMBINATION OF SEDATIVE AND TONIC MEASURES THAT ACT UPON THE GENITAL ORGANS AND THE NERVOUS SYSTEM.—TRUE SPERMATORRHŒA.—IMPOTENCE SOMETIMES A DISEASE OF THE IMAGINATION.—SYMPTOMS OF GENUINE IMPOTENCE.—ITS TREATMENT.—CONJUGAL HYGIENE.—EXCESS IN INTERCOURSE A RELATIVE TERM, AS IN EATING AND DRINKING.—FUNCTIONAL AND NOT ORGANIC DISEASES CAUSED BY SEXUAL EXCESS.

I PROPOSE in this chapter to offer here a few practical suggestions in regard to several delicate but very important points that stand in close relation with sexual neurasthenia and its hygiene —I refer to self-abuse, involuntary seminal emissions, spermatorrhœa, etc.

For one who is unmarried and in good health, the voluntary emission of seminal fluid is, within reasonable limits, both natural and healthful.

The question now arises, What is meant by the term inordinately frequent? This it is impossible to answer mathematically. It is impossible to lay down any rules concerning the quantity of food that we should take, or of stimulants and narcotics that we should use, that should cover every case. Just so it is impossible to say how many emissions of seminal fluid can be borne without injury. Some are apparently injured by one emission a week, while others have several weekly and maintain perfect health and strength.

Seminal emissions should *never excite any alarm so long as our health in other respects remains good.*

Let the genital organs take care of themselves so long as our digestion is good, our sleep sound, and our strength firm; and when we do begin to take treatment, take the first and chief care of the general system.

When a nocturnal emission, without our worrying about it, is followed by sleeplessness, headache, depression, and debility, we may know that it does harm.

Seminal emissions are frequently the cause of nervous and other diseases.

In science, as in other departments, serious mistakes are made by confounding effects with causes.

Seminal emissions are the *effects* as well as the causes of disease, and should be so considered.

Anything that weakens the nervous system may bring on seminal emissions. Exhausting fevers, dyspepsia, diseases of the brain and spinal cord, constipation, etc., etc., may give rise to over-frequent seminal emissions. Persons recovering from exhausting diseases oftentimes experience this trouble for several weeks. It usually lasts for a short time only, and disappears as the patient resumes his usual strength. The great fact to be remembered is that seminal emissions, when in excess, are symptoms of general debility, as well as causes of debility.

There is no question that in turn they do have a debilitating influence on the system, but only when they are in considerable excess, and by no means to the extent that is commonly supposed.

The great majority of cases of seminal emissions can by proper treatment and hygiene be substantially cured.

Self-treatment in these cases is to be avoided. In this disease of all others one needs a medical adviser in whom perfect confidence is placed. The worst results come when patients treat themselves, and all the time read and worry about the disease. Better far no treatment at all than such kind of treatment; better let the disease take its own course, and trust to time and nature and marriage for a cure. *I have known personally of very many young men who have passed*

through difficulties of the kind and are now well and the fathers of healthy families.

There are cases of insanity, of imbecility, and of death brought on by self-abuse and spermatorrhœa.

I have seen a number of cases where long-standing trouble of this kind, combined with *masturbation* and *worry*, have induced a chronic condition of nervous debility that seemed almost if not quite incurable.

The habit of self-abuse, when commenced early and carried to a great extreme, injures the nervous system, but it acts very differently with different constitutions. It makes a very material difference whether the habit is begun in very early life or after the age of twenty.

The earlier the habit is formed, other conditions being the same, the more injurious it is. In some cases infants and children of four, five, or six years of age are taught this habit by their nurses, or acquire it in some other way.

The habit is almost universal. It is indulged in by both sexes. It is not confined to civilized lands. The semi-barbarous and the savage are addicted to it. It is not confined to the human species, for animals also acquire it.

In order not to be misunderstood on this important subject, I sum up my views in the following propositions :

1. The involuntary emission of seminal fluid,

occurring now and then in the unmarried, is *not usually a disease*, and therefore does not, in the majority of cases, need any treatment. For an adult male in good health, and who is unmarried, it is a process that is a natural result of his continence, and is not usually injurious. The stopping of the habit of self-abuse is usually followed by involuntary emissions.

2. In some cases the emissions are so frequent that they may be regarded as a *symptom* of a relaxed and debilitated condition of the body, and should be treated, if they are treated at all, *not locally alone*, but also by *strengthening the general system*. The cases where these involuntary emissions are directly injurious to the constitution are much less frequent than is commonly supposed. In many cases excessive frequency of seminal emissions is an *effect* rather than a cause of disease.

3. The number and frequency of emissions that may be consistent with perfect health *cannot be determined by any mathematical rules*. What may be a sign of perfect health in one may in another be a symptom of general debility. It is just as impossible to lay down mathematical rules that will apply to all constitutions on this subject, as it would be to lay down definite rules concerning the quantity of food that we should eat, of water that we should drink, or of exercise that we should take.

4. The true way to treat seminal emissions when they are, or are supposed to be, more frequent than is consistent with health, is by a combination of sedative and tonic measures, designed to act both upon the genital organs and on the nervous system. The remedies that physicians now chiefly use for this purpose are *ergot* in its different forms, electricity locally and generally applied, iron, the zinc combination, bromide of camphor, lupulin, belladonna, digitalis, conium, gelsemium, and nux vomica, with the addition of passing the urethral sound, urethral electrode, rectal electrode, and the use of the cooling catheter. Surgeons also use urethral suppositories of various kinds, and application of ointments. Take good care of the general health. Strengthen the constitution by every agreeable method. Live generously. Work hard, keep brain and muscle active.

This advice, if acted upon, would save a multitude of unnecessary sorrows.

As soon as convenient, get married, but at all events keep diligently at work. Sometimes those who are married, and have abundant opportunity for sexual intercourse, are yet annoyed by involuntary emissions. A number of cases of this kind have come under my observation.

This fact shows that marriage alone is not always a perfect cure for these difficulties. It is, however, true that the majority of young men

afflicted with too frequent emissions are better off when happily married.

5. In those exceptional cases where there is some real difficulty of the genital apparatus—some irritability of the urethra, or other slight morbid condition—a patient should not attempt self-treatment, but should consult some honorable and judicious physician, in whom he has reason to feel confidence, and submit to his direction just as he would for any other disease.

Any injury that comes from this habit or from excessive sexual intercourse is due not so much to the loss of the semen—which is comparatively a trifling matter—as to the *nervous excitement. It also destroys self-respect*, and thus the sufferer is led to worry over himself, and to be tortured by remorse.

True *spermatorrhœa*, or flowing away of the semen at stool or with the urine, is a disease of which I have seen many instances. Only a microscopic examination can settle the question in any suspected case. When it exists, it indicates a severe but not incurable debility of the parts. The secretion that comes from the urethra, which is normal and healthy, is often supposed to be true semen.

IMPOTENCE.—*Impotence* is sometimes a disease of the *imagination.* To one person who is really incapable of performing the sexual act there are two who suppose themselves to be so.

Impotence may, however, be a genuine disease, somewhat analogous to dyspepsia. It appears in the following forms :

1. Slight deficiency both of desire and capacity.

2. Deficiency of capacity with *increase* of desire. This is sometimes found in the early stages of spinal disease. In these two forms the emission may come *too* early or even before introduction.

3. Profound deficiency both of desire and capacity. In this form the testicles are sometimes atrophied, and the penis is cold and somewhat benumbed or anæsthetic. Power of erection may be utterly wanting or very weak.

4. Erectile power increased abnormally, but no discharge of seminal fluid. This condition is called *priapism* and *aspermatism.*

Impotence is to be treated by the use of electricity, locally and generally applied ; the use of sounds ; and internally by phosphates, oil, ergotine, small doses of cantharides and iron, and nux vomica. Chloride of gold is also used ; likewise damiana. No two cases are to be treated precisely alike.

In some cases the prepuce is drawn over the glans penis, and the operation of circumcision must be performed by the surgeon before the patient will recover.

When there is stricture, it must be cured by surgical means. Go to work. Develop your

muscles and brain. Resolve to become useful or famous. The activity which will be necessary in carrying out these ambitions will divert the mind from imaginary evils if they are imaginary, and will be one of the best means of cure if they are real.

In the great majority of cases, patients after their marriage forget all about their imagined impotence. I have, however, known one or two exceptions to this rule. Only the physician can decide in any doubtful case.

It is very natural to inquire why it is that young men are so inclined to worry and become hypochondriacal on imagined disorders of the genital organs. Why is it that the slightest disease or suspicion of disease of the genital apparatus causes such absurd and unnecessary mental depression? The explanation is to my mind quite clear. *The great sympathetic nerve is at fault.* This nerve sends prominent branches to the *stomach* and to the *genital organs.* Therefore these three—the *brain*, the *stomach*, and the *genital apparatus*—are in very distinct and close sympathy with each other. They form a kind of family. They are in constant telegraphic communication with each other, and any injury of one is soon felt by the other two. It is partly for this reason that sexual disorders so often excite *neurasthenia* or nervous exhaustion.

In the light of this explanation we see also why

it is that *dyspepsia* so frequently causes depression of spirits.

Another reason why patients worry over and exaggerate their genital difficulties is the peculiar, and, to a certain extent, unnecessary privacy that is associated with the genital function. The desire for sexual intercourse is the most powerful passion of human nature, for the reason that it is indispensable to the perpetuation of the species, and yet children are brought up in blank ignorance of the structure and functions of these organs; are *compelled* to learn through vile associates and evil communications what they should have been taught at home and under parental guidance.

Finally, patients get false and exaggerated ideas on these subjects through the published writings of quacks, for the profession have written little or nothing for the people concerning the genital apparatus.

CONJUGAL HYGIENE.—In connection with this general subject of sexual hygiene, conjugal hygiene may very properly be referred to. On this subject I may remark:

First: Normal sexual intercourse, when not carried to excess, is a sedative and tonic. It promotes sleep, calms and strengthens the nervous system, and assists the digestion and all the other functions.

Secondly: Excess in intercourse is a relative

term. Just as in eating and drinking, what one may bear with ease may be very harmful to another. The tendency with the majority of people is to indulge more frequently than their constitutions will allow. Much of nervous disease is excited or aggravated by ignorance of or inattention to sexual hygiene.

I have seen a number of cases of sexual and nervous debility where even one coitus a week would be followed by sleeplessness, nervousness, headache and depression, and other symptoms of neurasthenia or nervous exhaustion. Such cases, however, are unusual.

Thirdly : The system, as a rule, can recover from the ill effects of conjugal excess, provided good treatment and hygiene are employed. One should not be discouraged because of the excesses of youth, but reform and recover from their effects. As a rule, *functional* and not organic diseases are caused by sexual excess.

Fourthly : The unnatural methods of intercourse, such as withdrawal, and the use of condums and like devices, are, of necessity, more harmful than natural intercourse, and they are made worse by the fact that when practised these devices encourage excess in the act ; indulgence is more frequent because more safe. It should be added, also, that *prolonged* intercourse and dalliances without gratification are especially hurtful ; in this way lovers are sometimes injured.

The evil effects of all these habits vary with the temperament. It is equally wonderful how much some can bear and how little others can bear in the way of natural or unnatural indulgence.

CHAPTER V.

DIAGNOSIS AND PROGNOSIS.

MEANS AND APPLIANCES.— DIFFERENT PHASES OF FUNCTIONAL DISEASES.—MARRYING AND NOT MARRYING.—THE CHILDREN OF SEXUAL NEURASTHENICS.

In making a diagnosis of these cases, means and appliances may be called into use for determining the nature of the disease—the ophthalmoscope, chemical tests for urine, the otoscope, the laryngoscope, electricity, auscultation and percussion, besides a most rigid and thorough inquiry and re-inquiry into the life, character, habits and symptoms of the patient and of his friends.

As the treatment of these cases draws on the whole resources of therapeutics, so the diagnosis draws on all our diagnostic resources. We are to differentiate organic from functional disease, itself a difficult and vitally momentous question; we are to distinguish different phases of functional diseases from each other and the different stages of diseases, and the relation of the main disease to minor and incidental diseases that run together with it in the patient's constitution. Excessive irritability of the prostate is a symptom that is

very frequently found in sexual neurasthenia. To determine this sensitiveness the most efficient method is to introduce the finger into the rectum, and press firmly from that point. In the healthy person such pressure causes little if any discomfort ; but the sexual neurasthenic not unfrequently complains of severe pain, sometimes of an acute character, but in many cases described as a distressingly sickening sensation. This sensitiveness is entirely independent of any enlargement, but is often associated with irritability of the prostatic urethra and with mucous discharges.

MARRYING AND NOT MARRYING.—There are probably few questions more often asked a physician, who sees and studies carefully cases of this kind, than this, whether there shall or shall not be marriage, or whether marriage is possible or advisable. Some sufferers go so far as to declare that they never will marry and will not be induced to ; they say they will not take a partner into their sufferings ; that they will go down to their graves bearing alone the burden of their lives. Persons who are in a pecuniary condition to marry, who have sufficient health to marry and sufficient to beget children, have said to me that nothing should ever persuade them into marriage as long as they lived ; the sentimental view of the subject kept them from domestic life when, from a physical point of view, it was quite unnecessary and sometimes positively undesirable.

The question of marrying or not marrying is an individual one, to be answered differently with different individuals. Very few cases are so bad as to make it necessary to say to them that they never will get married ; but very many require delay, treatment, care, attention, and the wisdom which comes from full consideration of their cases before they enter the marriage state. I frequently say to these cases, when they are unmarried, that it would be well for them to make arrangements, if possible, to become married in a year or two, more or less ; those who are engaged I usually encourage to maintain that engagement, except in very rare instances indeed, but always with qualifications as to time, which qualifications are determined by the nature of the case and various circumstances. Some cases are better for marrying promptly ; but in a majority it is sufficient to look ahead to marriage in a definite or approximately definite time—to have a general assurance that they can marry if they wish, when it is convenient to do so ; and from my experience to this date there is very rarely any regret for taking this course, provided the person thoroughly understands his condition beforehand and takes proper means for relief.

In the case of that very large class of persons who, when married, must indulge very moderately in sexual intercourse or are injured by coitus even when rarely performed, it is neces-

sary to prescribe sleeping apart for a time. This is quite an important prescription, in some instances indispensable for successful treatment. To those who have lived only on the Continent of Europe this prescription would seem meaningless, since there the custom of sleeping apart, in separate beds, is universal, at least among the better classes ; whereas in England and America it is almost as universally the custom for man and wife to sleep together in one bed.

THE CHILDREN OF SEXUAL NEURASTHENICS. —Another question often asked by sufferers of this kind is whether their children will be healthy ; whether they are likely to inherit their parent's disorder ; whether for that reason it would not be wise never to marry. My general answer to this is that I have never seen healthier children than those who have had for one of their parents a sexual neurasthenic ; and yet it is possible that in the future, by the law of inheritance, at a corresponding period of life, these same children shall manifest a nerve sensitiveness in the same direction as the parent, or in some different direction ; but this sensitiveness does not show itself in infancy to any marked degree. I have seen hundreds and hundreds of children of sexual neurasthenics, and I can affirm this, that they are as healthy as the average of children in the same class of society, and more than usually free, I am

sure, from the acute, inflammatory, and contagious disorders from which children suffer so much.

These sufferers oftentimes think that they are incapable of having children, and it is quite natural that they should have this delusion. Much observation, however, shows this, that as a rule even those suffering from true spermatorrhœa, as well as simple involuntary emissions, and who have so suffered for many years, may have offspring promptly after marriage, the exceptions being only cases of absolute and permanent impotence, which are comparatively rare.

CHAPTER VI.

ILLUSTRATIVE CASES.

SYMPTOMS INDICATED IN FORTY-THREE ILLUSTRATIVE CASES.—FREQUENT INDULGENCE PRODUCING STOMACHIC VERTIGO AND NAUSEA.—EYE TROUBLES FROM SEXUAL EXCESS.—SEVERE DEPRESSION OF SPIRITS AND NERVOUS FORM OF DYSPEPSIA.—LUMBAR PAIN, ACHING EYES, AND DIMNESS OF VISION.—VERTIGO AND PALPITATION OF THE HEART.—PAIN IN THE TESTICLES, LUMBAR SPINE, AND TIP OF THE SPINE.—CARDIAC IRRITABILITY.—MENTAL DEPRESSION AND DEFECTIVE MEMORY.—SHRUNKEN PENIS, RELAXED SCROTUM, AND TENDER TESTICLES.—AN AVALANCHE OF SYMPTOMS.—NERVOUS TROUBLES FROM SEXUAL DEBILITY.—EYES RED, SWOLLEN, AND WATERY, WITH FACE HAGGARD AND MELANCHOLY.—RELAXED AND CONGESTED CONDITION OF THE PROSTATIC REGION OF THE URETHRA.—DISTRESSING MENTAL IRRITABILITY.—CEREBRASTHENIA OR BRAIN-EXHAUSTION.—SEXUAL DEBILITY IN PERSONS OF GREAT MUSCULAR STRENGTH.—GENERAL DEBILITY FOR MANY YEARS FROM PROTRACTED SELF-ABUSE.—DISEASED PROSTATIC URETHRA.—SPERMATORRHŒA CAUSED BY MASTURBATION IN EARLY YOUTH.—SICK-HEADACHE A TYPE OF THIS DISEASE.—NERVOUS SYMPTOMS AFFECTING THE TESTICLE AND BLADDER.—NEURASTHENIA CAUSED BY GENITO-URINARY COMPLICATIONS.—EVIDENCES OF BRAIN AND SPINAL CORD DISTURBANCES.—DIMNESS OF VISION, ANÆMIA, AND ANTHROPOPHOBIA.—SEXUAL NEURASTHENIA IN WOMEN

THE SAME AS IN MEN.—SYMPTOMS NOT INDICATIVE OF SEX EXCEPT OVARIAN TENDERNESS AND SCANTY MENSTRUATION.—THE PROSTATIC URETHRA ANALOGOUS TO THE UTERUS.—OVARIAN AND WOMB TROUBLES PRODUCE SEXUAL NEURASTHENIA.—OVARIAN IRRITATION, PROLAPSUS, AND RETROFLEXION OF THE WOMB, ETC., ETC.

THAT the symptoms of sexual excess can occur in the married as well as the unmarried is illustrated by the following case, which I saw with Dr. M. Josiah Roberts :

CASE I. The patient was an engineer on a railway, and had been married for ten years. Two years after marriage he began to have involuntary emissions, which followed to excess. He had indulged in coitus on the average five times weekly for two years. When he was first brought to me the emissions were occurring two and three times weekly ; there was also a diminution in the pleasure of normal intercourse. He was troubled likewise with stomachic vertigo and nausea, muscæ volitantes, and asthenopia. Sometimes the involuntary emissions would occur right after coition. There was a roaring sound in the ears, a feeling as if a band were around the head, and a sensation of coldness at the vertex—the cranial centre, as I term it. There was constipation and much backache and spasm of the right eyelid.

The above is but one of a very large number

of cases that I have seen where eye troubles follow sexual excess, and in my writings I have many times called attention to this fact. Many a sufferer from neurasthenic asthenopia, as I have called it, or hyperæsthesia of the eye, as Mr. Jonathan Hutchinson calls it, needs sexual hygiene quite as much as glasses and rest, or Dyerizing ; indeed, without sexual hygiene the local treatment, however wise, may fail. I agree entirely with the philosophy of Dr. Landesberg, as announced in *The Medical Bulletin* for January 1882.

No one fact in the history of sexual exhaustion is more interesting and instructive than the opposite effects that are produced by excess. The *whole nervous system* may be disturbed with a vast array of functional phenomena, or the entire force of the disease may expend itself *locally*. In the following case there was scarcely any general nervous symptoms ; the patient was unusually strong and muscular, but the local weakness was of a decided character.

Case II. The patient was nearly forty years of age. At fourteen he began the habit of masturbation, which he kept up for thirteen years, almost daily, occasionally indulging also with women, and apparently was not harmed by this protracted excess. After marriage he was at first very excessive, and without apparent injury until a year or more before he consulted me,

during which time he had observed a decrease of power; for six weeks there had been no intercourse. There was an abnormal irritability; he was easily startled. Beyond this the difficulty was local entirely. The great amount of abuse which he endured for so many years without experiencing any notable harm is worthy of consideration.

CASE III. This was a tall, somewhat slender person, of a marked nervous diathesis. His symptoms were extremely weak digestion; the simplest diet of oatmeal and bread caused pain and oppression. He sometimes was troubled with diarrhœa; flatulence, or rumbling of the bowels, was very prominent. Severe depression of spirits was experienced also. A noteworthy symptom of his dyspepsia was that for the first hour or two after eating he felt well and strong. This is quite often the case in the nervous form of dyspepsia. In the course of two or three hours after a meal he began to feel badly, the stomach being most irritable when it was empty. The special form of morbid fear from which he suffered was the *fear of meeting drunken men*, a modified form of anthropophobia, or fear of man, being apprehensive of a row if he should come across them. Aching of the limbs was a very constant annoyance to him. After breakfast he would sometimes start out and walk, but before he had gonè a mile his legs would ache very

badly, and though he might rest all the day, he would still suffer. The extremities were much of the time cold in winter and summer. He was only able to keep warm by active exercise. He had been troubled with hot head as well as cold feet; claimed that his head sometimes was as hot as an oven. His eyes were easily suffused, became watery on slight excitation, and part of the time were painful. The exertion of reading a paper half an hour would oftentimes exhaust him. And with all this was irresolution, want of confidence in himself; he felt afraid to undertake any commercial enterprise. For this reason he kept himself in the position of a clerk, instead of going into business for himself. On going to bed at night it took a long time for him to get to sleep, sometimes not losing consciousness until two or three o'clock in the morning. In summer he had the most trying experiences—in July and August he became very much exhausted, miserable all the time; he slept but little, and was tired all day.

This case shows nothing perhaps very remarkable, but a large number of interesting symptoms, the most striking being the exacerbation of all the symptoms during summer, and the peculiar and somewhat rare phase of morbid fear, that of meeting intoxicated men. I have, however, seen other cases where the morbid fear took this form.

CASE IV. A young man, 27 years of age, began to indulge in an unnatural way at the age of seventeen, going to great extremes, as he said, as often as seventy-five times a month for three years. The first symptom he noticed was that he "broke out in blotches," to use his expression, all over; that is, acne of the face and body; then came three or four emissions nightly. He had been accustomed to go with women, but that did not cure his emissions. *One day he was taken suddenly with fear of society, while sitting with a friend in a house.* He had had it ever since. It appeared that this mental symptom came on as suddenly as neuralgia or an attack of hay fever, and when I saw him it was so severe that he was shut up most of the time in the house, finding it difficult to go out anywhere at any time. Other symptoms were lumbar pain, aching eyes, dimness of vision, aching in the vertex, heat and pain in the vertex and side of the head, sweating of the hands, whiteness of the gums, mental depression, insomnia. After eating a full meal he had itching of the head for a few moments. This patient was somewhat anæmic as well as neurasthenic, and was deficient in mental energy. The point most noteworthy in his case was the suddenness with which, according to his own account, the morbid fear came on.

CASE V. A young man, 22 years of age, had

pain in the head ; wandering pains in various parts of the body ; ringing in the ears without any deafness or signs of objective trouble in the ears. He was troubled somewhat with emissions. He was very strong, muscular, and capable of working, and did work on a farm. He was troubled also with vertigo, very much troubled with palpitation of the heart as well as fear of society, which he found it impossible to overcome. He was troubled also with fits of depression, especially on getting up in the morning ; as he expressed it, "I have a kind of fear of something which I cannot express" (pantaphobia). There was a lack of mental control and deficiency of memory. With all this, there was good appetite, regular bowels, and usually good sleep. The fact of interest in this case was the co-existence of palpitation of the heart and other nervous phenomena, with great muscular strength and great power for hard work. This patient entirely recovered, under treatment, in a short time. Examination of the urine found excess of oxalates, which is a frequent fact in this form of neurasthenia. Dr. Golding-Bird studied a number of these cases, and called them the oxaluria. This diagnosis is even now a very frequent one. Oxalates, like the morbid fears, are symptoms.

Case VI. A young student, who consulted me, told me that he began the habit of abuse at

the age of sixteen ; that at one time he had had involuntary emissions as often as seven or eight times a month. He was of a slightly nervous constitution, but well formed, and on the whole strong, of sanguine-nervous temperament. His symptoms were pain in the left testicle, especially when stooping ; a very considerable pain in the lumbar spine and at the very tip of the spine, a place where in women there is very frequently tenderness, but rarely found in men—real coccyodynia. On examination with the sound I found the interesting symptom that, from the irritation of the sound, he flushed and became very hot indeed between the eyes and nose and on the upper lip, but not in the middle of the cheek, except in one patch on the right cheek. This reflex phenomenon of flushing in this special way I had never before observed, although reddening of the face is very common on the passage of any instrument into the urethra, even where there is no feeling whatever of modesty on the part of the patient. I have since seen another almost similar case.

Case VII. A young man, 29 years of age, told me that at the age or thirteen he began the habit of masturbation, and kept it up for five years. He says he learned the habit himself, which is a peculiar statement, inasmuch as almost all say that they were taught the habit by schoolmates or servant girls. He confessed that

he indulged several times a day for six years. At the age of nineteen involuntary emissions began. At the age of twenty-two he began to be very nervous.

His symptoms were cardiac irritability, the heart beating on going up-stairs or walking rapidly ; getting out of breath even in conversation ; dimness of vision, at times coming and going in a most capricious way ; mental depression ; defective memory ; fear of lightning (astrophobia) ; drowsiness ; feeling of wetness and cold in the genital organs, as though water were passing out ; pain in the lumbar region ; weakness of the knees. In attempting to urinate, oftentimes only a very little urine would come at a time. After coitus he would at once have a prickling and burning at the bottoms of the feet. An interesting symptom was a tendency to excessive sleepiness ; he would sleep ten or twelve hours a day, but would not feel at all refreshed by it. The patient was unmarried and frequently went with women, but was not benefited by normal intercourse. The parts were examined and found to be very lax ; the scrotum was relaxed, and the testicles were small and soft.

In this case the fact worthy of chief notice was the drowsiness instead of insomnia, the most common symptom in these cases. Such cases are exceptional ; and from my experience they

are harder to control than cases of the opposite symptom, insomnia.

The condition of the nails is worthy of study in neurasthenia. That red or pink color which is characteristic of health sometimes disappears, and in its place there is occasionally a pallor and whiteness which is very easily noted—the result of the imperfect circulation in the fingers. Whether the fingers grow more rapidly or less rapidly in neurasthenia than in perfect health I do not know, but there is certainly no absolute arrest of the growth, as in some cases of paralysis.

Case VIII. A gentleman in middle life had the following history: The second year after marriage he was troubled with premature emissions—that is, the fluid came too soon on coitus. He was of good inheritance, had been married for ten years; he had injured himself or abused himself from the age of fourteen to sixteen; at eighteen had the gonorrhœa, and for one year was troubled with gleet; sometimes the emissions occurred three times a night; there was deficient pleasure in coitus; abstaining from coitus made him worse (this experiment he tried once for a number of weeks); travel on the cars hurt him; simple mechanical irritation, the jolting of the cars, being injurious to the sensitive prostate urethra; he was troubled with a prickly feeling in the lower limbs, there were pains in the

legs, from the knee down especially, and also a feeling of numbness in the lower limbs ; pain in the wrists ; there were tremblings of the muscles and muscular twitchings ; the memory was poor, there was no mental depression ; there was poor sleep and bad dreams ; he was troubled with anthropophobia—fear of man and fear of society—he feared human beings as human beings, and would walk in preference to going into a street car where many persons were ; he had lumbar pain, and was troubled also with dribbling of the urine, sweating hands, sweating scrotum, weeping penis and cold penis. Another of his morbid fears was that people were talking about him in regard to his affliction. Examination of the urine showed at one time spermatozoa and phosphates in excess. An interesting feature of his case was that he was better in warm weather, which is not generally the case, as most patients of this class, though not all, are worse in the months of July and August.

The above case is full of interest in very many ways. *First :* It shows that persons healthily and happily married yet suffer with sexual neurasthenia just as much as unmarried men. *Secondly :* The symptoms of pains in the legs simulating ataxy, and the twitching of the muscles simulating muscular atrophy. Cases of this kind are liable to be diagnosed as ataxy, or atro-

phy, or other severe organic trouble, and when they get well they are reported as cures of atrophy or of ataxy. These twitchings and these pains come from temporary local passive congestions in the spinal cord. Sometimes these pains are very severe indeed ; the patient feels as though a cord were around the ankle or around the wrist. When President Garfield was shot he had pains of this kind, of a severe character, to which he applied the phrase "tiger's claws," and they were sufficient of themselves to establish this general diagnosis, that his spinal cord was in some way irritated, since we have no proof that symptoms of this kind come from injury of the sympathetic or by pure reflex action, whereas in my cases I see proof abundant that they do come from irritations of the cord.* *Thirdly :* Liability to be injured by slight mechanical irritation. There are not a few cases of this sort in which the patient cannot ride in horse cars, or in carriages, or on the railway without being injured—simple mechanical irritations—repeated concussions are injurious to the sensitive prostatic region, and at times the whole body shares in this irritation. When persons so sensitive attempt to ride horseback they usually make themselves worse, and

* By this alone, I concluded that the ball had struck the spinal cord, and to this general diagnosis I adhered all through. I assumed, erroneously, as the autopsy showed, that the ball had lodged against or in the vertebræ.

sometimes bring on emissions thereby. *Fourthly :* The morbid fear that people were talking about his special trouble is very interesting, when we consider that the patient was intelligent and well balanced and sensible, an active and successful man of business. I have had cases of neurasthenia in women who were troubled with this morbid fear, which went to the borders, if not over the borders, of a delusion.

Case IX. A gentleman, 46 years of age, unmarried, was troubled for many years with sick-headache. When these attacks of headache left him the following symptoms appeared : pain in the back, head, and neck, and vertigo ; pain in the stomach, attacks of colic ; pain in left side ; chilliness even in warm weather ; twitching of the muscles ; very great flatulence and constipation. Examination of the urine showed very free spermatozoa and abundant pus. He could not bear sexual intercourse ; the third day after all his symptoms were worse.

In the above case these points are to be noted : *First,* That the evil effects of intercourse followed the third day. This is not an unknown fact, and I have many times called attention to it in my writings on these themes, but it is not universally known to the profession, and it is not watched for by patients, and therefore not understood. These evil effects of intercourse take place probably through the sympathetic nervous

system ; they travel slowly, and so we are deceived by them, and no doubt attribute them very often to other causes. *Secondly*, This man was very sensitive to alcohol. It is very common in these cases to be sensitive to alcoholic liquors, though some patients are very much relieved by them. *Thirdly*, The existence of spermatozoa in the urine is of interest in this case, the import of the fact being that it illustrates the exceeding frequency of this symptom in the married and unmarried, the old and the young. It is a symptom, and only a symptom, but an important symptom, and one to be studied. It is to be classed with morbid fears, with sleeplessness, with dyspepsia, with neurasthenic asthenopia, with roaring in the ears, with sweating hands, sweating scrotum and shrunken penis, grisly penis and relaxed scrotum, tender testicles, lumbar pains, twitching of the muscles, pains in the extremities, cold hands and feet, general chilliness, mental depression—as a symptom, a result, an expression of nervous bankruptcy, nothing more and nothing less. It may require special treatment as some of these other symptoms, when they are strong and imposing, may require special local treatment.

Case X. A man aged 33 was afflicted with spasmodic contraction of the urethra, with painful irritation, pain in the perineum, and at one time had frequent emissions, even when he had op-

portunities for intercourse. He had been mentally depressed, his eyes were very sensitive, so that they became painful on use ; some years before puberty he had injured himself by abuse ; he was troubled with dribbling urine after the act of urination was over, and the penis, on examination, was found to be cold, and sometimes very much shrunken—what I call the shrunken penis. The sensitiveness of the urethra in this case was very great ; even passing a sound caused pain in the back and debility during the next day. Warm sitz baths, which assist in some of these cases, injured him. Tonics of all kinds seemed to act badly. He was intelligent and clear-headed, not imaginative, and I think not disposed to exaggerate his troubles. He could devote himself to his profession.

The points in the above narration of special interest are these : First, that he is so sensitive to sounds. Passing a sound and allowing it to remain in the urethra is the regular old routine treatment for these cases, and sometimes it is very good treatment, but I meet with many who are injured by such treatment—whose urethras are so sensitive that they cannot bear a sound until that sensitiveness is reduced by procedures of some other kind. In such cases the sound does harm, not only temporarily but permanently, and if its use be kept up will make the patient worse and worse. I have seen patients who

were injured very seriously by this routine sound treatment. Patients of this kind should be individualized, just as in cases of insanity—each case being studied by and for itself—and if it is found that any routine, established, orthodox treatment works badly in any case, then our duty is clearly to retreat and try something else. I give up electricity, baths, hot and cold; give up the bromides, ergot, India hemp, and the zincs; strychnine and iron, and the mineral tonics, and everything that I find to be injurious in any special case.

Case XI. A man, aged 35, married, a manufacturer, had been for thirty years out of health. Almost the only symptom that he complained of was sounding and hissing in both ears almost constantly. His sleep was imperfect. He had stopped smoking, but got no benefit thereby. He observed that on Sundays, when he had nothing to do, he was but little troubled. For three years he had practised imperfect copulation, and had suffered from occasional emissions, even when by the side of his wife; he had also weeping penis, or prostatorrhœa, with very relaxed scrotum, as observed on examination.

The symptom of causeless singing in the ears is of importance when it occurs without any objective difficulty which can be seen by examination of the ear with the speculum. It is a very common difficulty. It is analogous, considered as a

symptom, to prostatic irritation, mammary irritation, spinal irritation, cerebral irritation, dental irritation, irritation of the eyes and hyperæsthesia of the retina, nervous dyspepsia, and often accompanies some one or many of these symptoms. Smoking in relation to nervous symptoms is one of the most puzzling, inconsistent, and annoying of influences. I have seen not a few nervous patients who, like the above, have stopped smoking and have made nothing by it; they have deprived themselves of a life-long pleasure without benefiting their health; but there are cases, and plenty of them, in which the patients are injured by smoking, and are better off if they cease entirely. There are cases where even moderate smoking is injurious, just as there are cases where even moderate drinking is injurious.

CASE XII. A young man, 20 years of age, was troubled with weekly emissions, which followed a habit of masturbation, which began before the age of puberty, at the age of nine, and kept up until he was fifteen. The symptoms of this case were sweating hands, red spots on the forehead, catarrh of the stomach, dilated and mobile and sometimes unequal pupils.

Of the above cases these facts are to be considered: That abuse began before puberty is far more injurious than the same habit begun after puberty. The earlier in life the habit is begun

the worse the effects, which seem to diminish with age in arithmetical ratio. The cases of persons who take up the habit of masturbation for the first time in mature life—that is, after twenty or thirty—are very rare, I think ; in almost all instances that come under the care of a physician the habit is begun either before puberty or shortly after it ; but in those cases where the habit is begun late the evil consequences are neither as speedy nor as serious as when it is begun before or at the time of puberty. The following case shows in a most interesting way that men who are happily and healthily married may be yet great sufferers from sexual neurasthenia.

Case XIII. The patient was nearly forty years of age, well educated, and active in his profession. His story was that when he was a boy of seven years of age he used to climb trees, and in so doing he experienced sexual sensations, with pleasure and with pain intermingled, and was much annoyed thereby ; so, much indeed, that he could not climb, and gave up the habit. At the age of fourteen he masturbated for one year, and emissions, as usual, followed. For some time during his school life he was troubled with emissions every night. He had practised for years, as I understood him, the habit of mental masturbation—that is, thinking over sexual matters and going through the act without the presence of a female or actual abuse. After marriage the

emissions stopped for a while, but in time reappeared. After he was grown up, and after marriage, he was injured so much by a jumping or bucking horse that emissions were brought on.

His symptoms, when he consulted me, were trembling of the hands, sweating hands, cold hands and feet, specially noticeable when he was occupied in playing a game of whist; grisly penis, irritation at the end of the penis, emissions while riding horseback, which his duties required of him; emissions while in the act of mental labor and mental excitement, a somewhat rare phenomenon; normal coitus, more exhausting than the emissions; mental depression, irritability, roaring in the ears, deficient memory and deficient mental control, shrunken penis, but no phimosis. The patient was a sufferer from hay fever. He was so sensitive that tea was poison to him.

In the above case is to be noted, *First:* The abnormal excitability in childhood, quite independent of any evil habit. This comes from an inherited sensitiveness; a stout, healthy, coarse, ruddy lad would not be troubled in the way that this man was in climbing trees; this excess of passion comes not from strength, but from debility, and is quite analogous to nervous dyspepsia, and the abnormal mental activity of those who are on the edge of insanity. *Secondly:* The evil effect of horseback-riding is

to be noticed. Horseback-riding is constantly recommended to these patients as a routine treatment, whereas it is often an exciting cause of the emissions, and, in general, of the symptoms of sexual neurasthenia. The cause is mechanical. This patient told me that when riding horseback he grasped his thighs firmly against the horse, which caused a sensation in the genital region, which is not strange when we consider the close relation between the inner part of the thighs and the reproductive system. *Thirdly:* Injurious effects of normal coitus, even when rarely performed. The number of persons with sexual neurasthenia and with other varieties of neurasthenia, even the traumatic or accidental forms, as well as the cerebral and spinal and digestive, who cannot bear normal intercourse with their wives, even rarely, is very large indeed. If such persons indulge as rarely as once or twice a month, or once in three months, they are injured, and never benefited thereby ; the evil effects may not appear at once, that night, perhaps ; even they may sleep well the same night, but the second or third day after comes an avalanche of symptoms ; the morbid fears are all increased, they have back pain, and head pain, and are sleepless, and have pains, throbbing and beating, itching in the perineum and around the genitals, sensitive urethra and frequent passing of water, with dribbling urine,

constipation, coated tongue, with indigestion, mental depression, and oftentimes great irritability of the eyes, so that they cannot read or write with comfort. It is a fact that must be known, that to many nervous persons normal sexual intercourse is as much a poison as alcohol, or tobacco, or chloral, or opium, or belladonna; there is not force enough left in them to reproduce the species or to go through the process of reproducing the species; what is most interesting to note is that these same individuals, sensitive as they are in this special direction, are capable oftentimes of great physical labor, and fill in many cases positions of responsibility and activity. Their debility seems to flow into this special channel, leaving the other functions strong enough for usefulness, if not for happiness. Further, it is to be noted, these are not old and worn-out persons, but young and middle-aged men, between the ages of twenty and forty-five or fifty, in the golden and silver decades, just the time when the reproductive powers are best, and when brain and muscle are capable of working at their utmost speed.

Case XIV. A. W. M., aged 37, Scandinavian, came to America in 1861; entered army 1861, served during the war as an enlisted man, and after the war as clerk in adjutant-general's office, Department of Dakota, to present time. Is married happily, and has three children. Con-

sulted me during spring of 1877 for weakness of genital organs. Would have an emission before he had fully entered his wife, after which his erection would at once subside. He also complained of a nasty, pasty feeling of the genitals; stated that a slight whitish discharge came away with the last few drops of urine. On examination I found a long prepuce which completely covered the glans penis, and could be with difficulty retracted. A moderate amount of smegma was found. The slightest friction of the glans caused an erection, and if the friction was continued for half a minute an emission would occur. The erections were very imperfect. The scrotum was relaxed, the testicles hanging very low, and the veins on the left were much dilated. He complained of a constant fear, which had existed for about three months, that he might in some manner contract a venereal disease and communicate it to his wife. (His habits in early life had been exceptionally good, and he had been a faithful and virtuous husband.) I advised circumcision, which was done a few days later, and he was put on bromide of potassa and tonics (quinia, strychnia, and iron). He soon forgot his fear, and his sexual powers became as strong as ever. He did not consult me again for more than a year, when he returned with the same morbid fear that he might in some unusual manner contract some disease of his sexual organ.

He was afraid to use a public or even a private privy or water-closet ; was afraid lest the coloring matter in his clothing should cause disease of these parts, etc., etc. Every imaginable possible cause of disease was thought of by him and made the occasion of a visit to my office to have his mind relieved, he well knowing what I would say to him. Another course of bromide of potassa and tonics brought him all right in a few weeks. At the same time he was directed to not apply himself too closely to his duties. He has consulted me twice since, and has been relieved by the same treatment both times. At present he is perfectly free from fear. His fear has not at any time taken any other form.

CASE XV. A man in middle life, from a distant place in the country, consulted me for involuntary emissions of many years' duration, and associated with neurasthenia and mental depression. The patient would not tell me his name nor give me his address, but stated that he had been engaged in the occupation of teaching, but had alternated it with more or less labor on a farm, and distinctly declared that the nervous troubles coming from his sexual debility had, so to speak, dislocated his whole life, and compelled him to abandon, in whole or in part, what he had desired to do. The patient presented such a picture of physical debility as is often described in the advertisements of charlatans, but which

are generally supposed to have been made up for the purpose of terrifying young men. His eyes were red, swollen, and watery; the face was haggard and melancholy, and there was the characteristic and almost diagnostic timidity. Memory and the power of mental concentration had been seriously impaired. The patient stated that the semen came away with the urine. On this point I was doubtful, but an examination fully established the claim.

The habit of masturbation, which had been faithfully followed in early youth, had been discontinued, according to the patient's statement; but the effects—true spermatorrhœa and neurasthenia—remained.

In regard to the results of the treatment advised, no information has been received.

This case confirms, so far as a single case can, the familiar but questioned claim that spermatozoa may flow away with the urine. In short, it was a case of true spermatorrhœa—a running away of the seminal fluid independent of any natural or unnatural excitement or of any irritation.

Case XVI. A young gentleman, 27 years of age, consulted me for seminal emissions, with various symptoms of nervous exhaustion associated. The emissions were not very frequent, sometimes not as often as one a week; sometimes two or three followed each other on successive nights.

The appearance of the gentleman would indicate pretty fair health, and yet there was, as is often found in cases of neurasthenia, a degree of insomnia and mental depression. There was no real hypochondria, no disposition to magnify or, to any great extent, to worry. There was the usual history of masturbation in his youth, but it had not been carried to very great excess. There was also the very common symptom of sweating of the palms of the hands. His circulation was not entirely good. Here was evidently a pathological state, though not of the severest order. Although the emissions were not frequent, yet they came in such a way that they had both temporarily and permanently injurious effects, for he was always worse in the mornings after there had been the involuntary emission. There was true spermatorrhœa. The nervous sensitiveness of the patient was illustrated by the fact that there was a tendency to faint on the application of the faradic current of electricity. The galvanic current, which is usually more powerful, had no such effect. He was treated with central galvanization, general and local faradization. The localized faradization was used externally and internally ; he was treated on the principle prescribed in the first series of this paper. The result in a few weeks was an entire cure, which, as I afterward learned from the patient, was permanent.

The above case illustrates two points: *First*, involuntary emissions, even when pathological, are not necessarily accompanied by hypochondria; *secondly*, they can be controlled by treatment, even when the patient remains unmarried. In some cases involuntary emissions have been cured by treatment, although the accompanying symptoms of nervous debility were unaffected.

The patient has occasional emissions now, but they are not sufficiently the cause or effects of disease to require treatment.

The noteworthy fact in this case was, that the improvement took place while the patient remained unmarried. The indiscriminate prescription of marriage for all such cases, and all cases of sexual exhaustion, is oftentimes impracticable, usually unnecessary, and sometimes unscientific. All or nearly all cases can be helped without resorting to marriage, while in some instances marriage is to be for a time deferred. The large number of cases of involuntary emissions and impotence in the married is the best of all arguments against urging marriage as a specific for all forms of genital weakness. Marriage is sometimes a good hygienic remedy for hysteria in women, as it is sometimes for sexual debility in men; but it is no more a specific for the one than for the other.

CASE XVII. A lad, 18 years of age, consulted

me in the fall of 1878 for the following symptoms: Sweating hands (palmar hyperidrosis), dilated pupils, downcast eyes, anthropophobia or morbid fear of society, mental depression and a tendency to jerking of the limbs, not only at night, but even when sitting or standing. Even when sitting in the office, while being treated, his feet would involuntarily move up and down. There was also the redundant prepuce, but not real phimosis. There was the almost invariable history of masturbation, begun at the age of thirteen or fourteen, and there were the usual results. The involuntary emissions came on only at night, were regular in appearance, and were not usually more than six or eight times a month. They were followed frequently by pains in the back and by aggravation of all the other symptoms of which I have spoken. In this case there was a certain degree of hypochondria, but it was not of a profound character. The patient was treated electrically in central and local methods, with hypodermic injections of atropia; internally by gelsemium, zinc, arsenic, and other sedatives. I lost sight of the patient before wholly restored, but he was under observation long enough to reduce the emissions in frequency, and especially to mitigate the evil effects that followed them.

In the above case the frequency of the emissions was certainly not great. According to the

authorities, the patient was not in a pathological state, and yet, if the above symptoms did not indicate disease, certainly no symptoms can indicate chronic functional nervous disease. After allowing all that can possibly be claimed for the action of the mind on the body in producing disease, there remains clear proof of the actual influence of sexual disorder, producing a group of nervous symptoms independent, or at least partly, of the mind—the fear, the expectations of the patient. The group of symptoms by which we are wont to diagnose such diseases, for example, as locomotor ataxy, spinal paralysis in children, hay fever or small-pox, and diphtheria, are not more truly diagnostic of those diseases than is the above group of symptoms diagnostic of sexual disorder. When a man has these symptoms together, either alone or in conjunction with others, which will be mentioned in the course of these articles, the diagnosis, neurasthenia of a sexual origin, can be made without hesitation, whether the involuntary emissions are frequent or infrequent. In the majority of these cases the involuntary emissions occurring rarely or infrequently follow the stopping of the habit of masturbation, and themselves act as causes of nervous symptoms. The whole system becomes involved; the treatment therefore should be general as well as local.

That involuntary emissions may occur in the

married as well as in the unmarried, or those who have full opportunity for normal coitus, is illustrated by the following two cases :

CASE XVIII. A number of years ago a young gentleman, about 30 years of age, who had been several years married, consulted me for very frequent-occurring emissions at night. He was of a very slight build, of the nervous diathesis, and, at times, had been excessively indulgent. There had also been self-abuse in early years. The involuntary emissions would appear, even when a few nights before there had been opportunity for emission in the natural way. He did not have all the symptoms connected with the emissions that sometimes are seen in unmarried young men. He was not at all hypochondriacal. I treated him for a considerable time by the sounds, by electricity connected with the urethral sounds, by central and general application of electricity, and a part of the time by sedative and tonic medicines. The case was more obstinate than oftentimes similar cases are in the unmarried. He did not respond rapidly to the treatment employed. But after a number of weeks the improvement was of so positive a character that it was deemed no longer necessary to continue the external applications ; tonic medicines were advised for some time.

In the above case the emissions were certainly pathological. They were the results of a debility

—a relaxed and congested condition of the orifice of the prostatic region of the urethra.

CASE XIX. Last year I was consulted by a gentleman in the beginning of middle life ; unmarried, but had abundant opportunities for sexual intercourse ; with symptoms of impotence of the first stage and involuntary emissions, unless he frequently indulged. If a week or two passed without coitus, involuntary emissions would appear at night. He was a gentleman of unusual strength, and had been accustomed to great freedom in sexual intercourse. The symptom for which he required aid was merely the beginning of impotence. He could not indulge so frequently or so satisfactorily as formerly. The disease in his case was purely local. There were absolutely no general nervous symptoms. There was not a trace of neurasthenia. In that respect the case is an interesting contrast to those above detailed in these papers. With persons who are strong, tough, wiry, excess makes itself felt locally, and not generally or constitutionally. He did not have any of the group of symptoms which I have stated as diagnostic of neurasthenia depending on sexual excesses. There was no sweating of the hands, no physical debility, no anthropophobia, aversion to society, no morbid fear of any kind, and not the faintest degree of hypochondria. He studied his symptoms calmly, sensibly, philosophically, and he

desired relief both for what he already experienced, and for what he feared as a result in case he neglected himself. Locally, it was found on examination that the penis was cold at times, and on passing the sound with care blood would always appear, evidently coming from the prostatic region of the urethra. The patient was treated by the use of the sounds, by electricity, by the zinc combination, ergot, belladonna, and cantharides in very small doses. Chloride of gold was also employed, and at one stage damiana ; at the same time it was especially insisted that abstinence for a time should be observed. The patient faithfully carried out every direction, and was rewarded by improvement of the most satisfactory character. He was warned against indulging as formerly.

He is still taking treatment a portion of the time. The only relapse that he experienced was for a period of relative excesses, when he thought that his recovery was absolutely permanent.

In this case the involuntary emissions were surely of a pathological character, as is proved by these facts : *First*, they did not exist prior to the first stage of impotence. A person in good health, general and local, will not have emissions several times weekly, when he has frequent opportunity for normal intercourse. *Secondly*, these emissions appeared with the symptoms

of impotence. *Thirdly*, they have disappeared with the improvement of the local condition of the patient. In the same case the entire absence of emissions might be required as a pathological symptom, as indicating a degree of impotence not necessarily absolute, but a torpid condition of the parts. This condition is observed sometimes after many years' kept-up habit of masturbation, and sometimes after very prolonged continence. The following case illustrates this :

Case XX. A gentleman about forty-one gave me this history. He began the habit of self-abuse at the age of sixteen, kept it up a few years, then occasionally went with women. For twenty years he had been entirely continent. The emissions which he had had at one time disappeared. There was very much diminished desire, and scarcely ever any involuntary emissions. He desired to get married, and hence sought advice and treatment. There was a very much elongated prepuce, which, however, could be pushed back, and kept back, as it can in some of these cases, by a little effort. There was slight paresis of the bladder, with frequent micturition. The nervous symptoms were not very marked. There was an abnormal or mental irritability, a very frequent result of the sexual disturbances. Otherwise the person was in fair and enviable health, weighing about 155 pounds ; a good sleeper ; of good appetite, and

without any mental depression or hypochondria. Examination of the urine revealed the presence of spermatozoa and spermatic globules; very little of the urates and the oxalate of lime, and a few epithelial cells, especially from the prostatic portion of the urethra. The gentleman had an appearance of youth—that is, he looked younger than he really was—a symptom oftentimes found in these cases, even in the worst cases of sexual causation. One proof that there was a vein of neurasthenia in the man was that smoking a strong cigar would at once affect the man's nervous system, and the genital parts would suffer. There was at times an escape of semen at stools. Here is a case of true spermatorrhœa, as is made absolutely clear by the examination of the urine and by the diurnal emissions. In regard to these diurnal emissions, it may here be observed that non-expert testimony of the patients themselves may be generally accepted, for the prostatic and the urethral fluid does not come out in large quantities at such times; but even granting the liability of mistake in this respect, the examination of the urine at the hands of an expert settles the question of any doubtful case. This patient was treated in various ways. The details were changed from time to time: by the cooling catheter; by the urethral electrode, and by sounds; by central galvanization, general faradization, and electrolysis of the prostatic

urethra; by strychnia, zinc, chloride of gold; and the improvement was sufficient to warrant his preparation for marriage.

In the above case the almost entire absence of seminal emissions may be regarded as an evidence of declining power. It was an accompanying symptom of true spermatorrhœa and impotence.

Case XXI. In the fall of 1878 a gentleman consulted me for the following symptoms: There were frequent attacks of intense pain and heat behind the ears. These attacks were especially severe after eating dinner and at night. There was oftentimes a feeling of fulness in the head, and decided evidence of cerebral congestion; sleep was inconstant and treacherous; he was easily kept awake by mental excitement, or by expectation of any responsibility to be incurred. A symptom that distressed him much was mental irritability. He was annoyed excessively, and out of all reason, by the play of children, or by any disturbances or unpleasant things that might arise in his family or business relations. Another evidence of his nervous susceptibility was, that he could not play a game of cards or billiards without getting nervous and having palpitation of the heart. Yet another evidence still of nervous susceptibility was that he could not bear the touch of flannel to the skin; the very thought of it would give rise to

creeping sensations on the spine. An interesting nervous symptom in this case was that oftentimes, in attempting to make water under circumstances of haste or excitement, as when there were persons standing behind him at a public urinal, wishing his place, there would be complete temporary retention.

Asthenopia was also a very distressing symptom ; reading fine type made his eyes ache, so, likewise, did reading at night, or on the cars, or writing during the day. His occupation was that of a clerk in a banking house. The pulse was frequently very rapid, sometimes up to 110, to 120, rarely approaching the normal standard. At least, in the times that I first saw him, so susceptible was his heart to tobacco, that very little smoking would excite his pulse and give him a sleepless night. The tongue was white and furred, and he was liable to attacks of indigestion, especially after dinner. This patient was a strong, muscular Englishman, florid in appearance, and capable of walking far and long, and enduring much physical exertion of almost any kind. And yet this man, whose appearance suggested perfect health and unusual vigor, was a typical case of cerebrasthenia or brain-exhaustion. There were no evidences whatever of myelasthenia or spine-exhaustion. There was no hypochondria in any degree, no tendency to worry over symptoms, and little or no mental

depression. The history of this case bore the test of frequent cross-examination and close study. The questions to be decided in his case were : *First*, the cause of this cerebrasthenia, or this nervous susceptibility associated therewith in this strong Englishman ; *secondly*, what form of asthenopia was he suffering from, and what relation had the asthenopia to the nervous symptoms in their general aspect? Was it a cause or effect, or both, of the exhaustion?

The history of the case, the results of the treatment, answered clearly both of these questions. The patient had masturbated at the age of fourteen or sixteen. After the abandonment of the habit there had been seminal emissions. For five years he had been married. He usually had intercourse but once a week. In almost all cases intercourse thus rare was followed by sleeplessness and heightening of all his nervous symptoms. Examination of the parts showed a fair development, but a prepuce somewhat elongated and redundant. It, however, was pushed back behind the gland and kept back, by my advice, with a little effort on his part. The lips of the meatus were congested, and suggested disease of a portion of the urethra. The urethra was also hyperæsthetic. There was, however, no difficulty in urination, and had never been, and no stricture, and had never been any gonorrhœa. I felt quite confident from the his-

tory of the case, and especially from the fact that the difficulty with the eyes was inconstant, coming and going with the existing causes, that the trouble was of a neurasthenic character, and that expert examination would prove it. Dr. Roosa saw the case, studied it carefully, and found, as he stated, nothing save a slight retinal congestion to account for these symptoms. Colored glasses were, however, recommended and used.

The results of the treatment have confirmed both this general and special diagnosis. The patient was at first treated generally, without any reference to the sexual organs, and with a certain degree of improvement of some of the symptoms. But nothing permanent was gained in many of the symptoms until *local* treatment was employed, including cooling catheters, cooling rectal electrodes, cup-sounds, with various ointments, internal galvanization and faradization, and electro-puncture. Other methods of local treatment employed in this case were, injections in the urethra of bismuth water and witch-hazel, the local application of iodoform, and suppositories of various combinations. The effect of this local treatment was of a most satisfactory character. Even where no general treatment was employed, every symptom improved, and a majority of the symptoms have disappeared almost entirely.

CASE XXII. I have now under observation a gentleman over fifty years of age, whose prostate gland appears to be in a condition analogous to that of hyperæsthesia of the eye. He had been examined, before coming to me, by a distinguished surgeon, who could find no trouble with the prostate gland ; and yet, so irritable is he that a walk of a mile or two will cause great pain in the region of the perineum and in the lower part of the back.

An ophthalmologist of reputation had carefully examined his eyes, but could find nothing the matter with them, and yet for years they had caused him intense suffering, making it difficult for him to read or use them as he desired. It is possible that the prostate gland and the eyes are in the same pathological state : irritable and painful ; neurasthenic, congested at times without being inflamed or enlarged ; but none the less diseased because we cannot see the disease either with our eyes or the imperfect means of supplementing our visual deficiencies. This man had a nervous inheritance ; began masturbating at puberty, abandoned the habit at the age of eighteen or nineteen, worked hard in business, almost always had cold feet and hands, married at twenty-seven, had involuntary emissions after his marriage—a case clearly enough a type of those referred to by Mr. Hutchinson, and to the study of which this series of articles is devoted.

A number of times in the course of this work it has been asserted that functional nervous diseases are hardest to cure in the strong, phlegmatic, and vigorous, other conditions being the same. It has also been repeated again and again that irritation, abuse of the sexual organs in an unnatural or natural way, may have two very different effects—may be either local or general. When the effects are general and constitutional we have neurasthenic asthenopia, as before described, in all its forms, morbid fears in their different varieties, sweating hands and feet, headache, backache, myelasthenia (exhaustion of the spine), with or without the spinal irritation, nervous dyspepsia, pain on pressure of the vertex, and so on, with a long row of functional nervous symptoms that make up the picture of neurasthenia.

When the effects of sexual excess are local only, we have impotence in its different grades, sometimes in its worst grade, with the symptoms of prostatic congestion, lack of desire and lack of power, premature emissions, coldness of the parts, while at the same time the constitution in general is unaffected. The man is as strong for his muscular or mental work as ever.

Case XXIII. The following case shows also how sexual debility may exist in persons of great muscular strength. A gentleman thirty-seven years of age, an athlete, powerful, and distin-

guished in the gymnasium, large frame, though not very tall, consulted me two or three years ago for symptoms of sexual debility, which he feared might prevent his marriage. His history was that he began masturbation at the age of fourteen, kept up the habit off and on for many years, and then he was tormented with frequent erections, though the emissions were only about twice a month. This strong, healthy man was so troubled with palpitation that, as he said, sitting in church he would shake the pew with the beating of his heart. After a course of sedative and tonic treatment, he at last got married, though with trembling and fear.

The day following his marriage he came to me in great distress, representing that he had made a great mistake, inasmuch as he was unable to consummate his marriage completely ; he was told to wait for time to make the matter right ; at the same time was treated with sedatives and tonics, and in a few days he reported a satisfactory result.

There had been in his case at one time symptoms connected with the prostatic portion of the urethra, for which he was treated with belladonna, ergot, and very small doses of cantharides.

The chief fact of interest in his case was the co-existency of this local debility of a certain grade with not only great but enormous muscu-

lar strength. The heart also in his case was more like a delicate woman's than that of a strong man, and I see similar cases continually.

I insist upon this fact, and repeat it again and again, because it seems to be new to the profession, although it has so often been referred to ; it is an observation of great importance and scientific value in diagnosis and therapeutics.

The following case illustrates this latter type, where the excess makes itself felt locally, the patient remaining all the while strong.

The case also represents the satisfactory result of treatment.

CASE XXIV. A young man, thirty-three years of age, began the habit of self-abuse at the age of seventeen ; after three years he stopped ; then came involuntary emissions. When he consulted me, in the fall of 1878, he had the following symptoms : flushing of the face, anthropophobia (fear of society), mental depression. His anthropophobia was so profound that at times, in going into company, his heart would beat and he would feel weak in his knees. These were all the general symptoms with which he suffered.

On the other hand, he had a good pulse and an unusually strong stomach, firm muscles, and a capacity for severe and protracted muscular toil in his trade. Examination of the parts showed there was no stricture and no phimosis, although at one time he had the gonorrhœa.

There were, however, clear evidences of sexual debility ; there had been real aspermatism ; there had been erections without any emissions to follow ; at times he was utterly incapable of any satisfactory intercourse.

For several months before he consulted me he had no involuntary emissions ; he was much distressed in regard to himself ; especially did he want to get married. I treated him a number of months by electricity, by the methods described, using general and local applications, the electrolysis of the prostatic urethra, urethral electrode and the cooling and heating catheters, wire-brush electrode, counter-irritation of the perineum and the lumbar spine, the injection of liquor bismuthi, also the local application of iodoform.

There was no hyperæsthesia of the urethra in any part, a condition we so often see in these symptoms ; he had passed through that stage. There was no difficulty in using whatever local treatment we wished. Last spring he had so far improved that I consented to his marriage. He followed the advice given, was married, and has had no difficulty in fulfilling his marital duties ; the anthropophobia and other symptoms disappeared long since.

In the above case there was illustrated the very marked and very interesting psychological fact that coitus may be unsatisfactory with a stranger even when there may be no disease

whatever. Before his marriage he made an experiment of that kind with a stranger, and failed. This failure, as I told him, was psychical rather than physical, for after his marriage, which soon took place, there was no difficulty.

Case XXV. A gentleman, aged 37, consulted me for general debility that had existed for very many years. At the age of fifteen he formed the habit of self-abuse ; kept it up for some time, and subsequently went with women occasionally ; but at no time, according to his statement, had there been full satisfaction ; the emissions came too soon, and intercourse was possible only at long intervals. On the examination of the parts, the right testicle was found quite irritable, a condition very common. In this patient, on pressure, considerable pain was experienced ; the right testicle was somewhat longer than the other ; the prepuce was somewhat elongated. He was a man of large size, of great physical strength. He had very few of the nervous symptoms that so often accompany cases of this sort when there is a history such as he gave. The conjunctiva was somewhat congested, but the eyes were not sensitive. There was a degree of anthropophobia. The prepuce was also extended over the glans. He had been treated surgically, but not with any satisfaction, by means of sounds. Examination of the urine showed no albumen or sugar or spermatozoa, but an abundance of the

oxalate of lime and of uric acid. Here was a case where there was a local debility, not of an absolute character, however, but of long standing and of some importance in a man of immense size and vigor, capable of much physical endurance. Every other function was well performed : the appetite was good, the digestion was good, the bowels gave no trouble, he was not usually depressed, his memory was not weakened, there was no palmar hyperidrosis so often seen in these cases, no backache, or back pain of any kind ; the patient was enjoined to abstain from sexual intercourse for a while, and was treated by a combination of ergot and belladonna, by the mineral acids, by internal faradization, by cooling and heating catheters. The results in all respects were satisfactory, so that in a few weeks he was married.

I have now under care a gentleman who, with other nervous symptoms dependent on true spermatorrhœa, is annoyed by attacks of irritability of the eyes, of a most indefinite but very disagreeable character, and which compel him to rub and press upon them. A well-known oculist failed to find anything to explain the symptom. The attacks come and go in a moment. That they depend directly on the diseased prostatic urethra is beyond question, and the treatment is ordered in accordance with that diagnosis.

Case XXVI. At the present time I have under observation a young man who is the victim of insomnia, flushings of the face, with periods of depression. The only symptom of which he complained on consulting me at first was insomnia; but on detailed examination it was soon found that involuntary emissions were annoying him, and that the long habit of masturbation was not fully overcome. On examining the parts it was found that the foreskin was so attached to the glans that only a very small orifice was left for the escape of the urine. It was and is a question whether the insomnia and other nerve-symptoms are produced by the masturbation and the involuntary emissions, or reflexively by the elongated foreskin. In order to settle this question, it was decided to first try only medical treatment; and he was placed under the external applications of faradic electricity, and, internally, conium and digitalis were prescribed, and also the zinc combination, which, in nervous disease, I am accustomed to make much use of, particularly where sedation is required—bromide of zinc, valerianate of zinc, oxide of zinc, equal parts, sometimes adding small doses of the phosphite of zinc, or belladonna, or physostigma, or ergot, increasing the quantity from time to time. Under this treatment, combined with attention to diet, he is already improving; but if the result is not perfect, an op-

eration may well be advised ; for the meatus is so small that urination is a tedious process, and the passage of a large sound is impossible. A constant life-long irritation of this kind might surely excite all the evils from which he suffers, as Dr. Sayre's cases demonstrate.

Case XXVII. Some years since, a man in middle life consulted me for a certain grade of impotence, which, as he had just married a second wife, was a cause of much alarm. He was, in all other respects, in absolute health ; but the decline in sexual vigor was decided. Under a course of treatment, mainly electrical, he fully recovered, and I believe the results were permanent. There was no atrophy of the parts, as we sometimes see in cases of this kind ; there was simply functional debility, the effect of previous overuse, combined with undue anxiety lest he might not be equal to the duties of his second marriage. The feature of chief interest in his case was the absence of all other morbid symptoms, either local or general -the coincidence of perfect health with weakness of the genital function. This is not an exceptional case ; I have seen many such ; but their significance is not thoroughly understood.

Case XXVIII. A young man, not quite thirty years of age, gave me this history : He had formerly been troubled with great pain in the lumbar spine, which had persisted for some time,

but which had been relieved some years before by stretching of the prepuce, for a degree of phimosis that existed. The relief which followed this operation for this special symptom of lumbar pain was interesting, and, in his case, I think, was not due in any way to mental influence.

When he consulted me he was troubled at times with inequality of the pupils ; but this symptom was not constant as in organic disease of the spine, but came and went, like other symptoms of sexual neurasthenia.

He suffered at times from attacks of nervous chills, with depression. He likewise suffered from fear of society, so common in these cases.

With all this there was an incapacity and incompetency, at times, for his work, which was confining and exacting, and the query arose whether he ought to continue in his profession. Being a thorough expert with the microscope, he had made very many examinations of urine ; and, but a short time before seeing me, he had examined his own, and found that it contained spermatozoa. This was a surprise to him ; but subsequent examinations confirmed this analysis.

For years this individual had been in a state of chronic exhaustion without suspecting that spermatorrhœa might be an accompanying, if not a causative, factor. Even allowing that this unnatural flow of semen in the urine or at stool is, in some instances, an effect of the general neu-

rasthenia, it is surely important to know of its existence. Regarding it as a symptom only, it is a symptom to be noted and treated.

This case was put under both local and general treatment, and is improving.

CASE XXIX. A physician in middle life, of very fine organization, of marked nervous diathesis, consulted me for a group of nervous symptoms from which he had suffered seven or eight years. The symptoms were pain in the upper part of the back and shoulders, mental depression, insomnia, and shooting pains resembling ataxy. The bladder was exceedingly irritable; putting the hands in cold water caused the urine to flow; on any excitement also there would be discharge—the weeping penis.

He was troubled also with a great dread of company, especially that of strangers; but, by taking great care of himself, was able to attend to a very large practice; though he was easily prostrated by over-exertion or by mental disturbance. Seven years before he had lost his wife, and had not married again. The urine was examined by Dr. Mittendorf, and found to contain a quantity of spermatozoa. This was somewhat of a surprise to the patient, who is himself an accomplished diagnostician; though at the same time it confirmed his suspicions.

Involuntary emissions had annoyed him before marriage, and had recurred after the loss of his

wife seven years before. At times, as is quite frequently noticed in these cases, the penis and scrotum were cold to the touch.

How long the spermatorrhœa had existed in this case can never be known; but as the nervous symptoms had been troubling him for years, it is not probable that the spermatorrhœa was a new complication.

On using the different kinds of local measures that had been referred to in other cases of this series, it was found that the urethra was very irritable indeed, and that unusual caution was needed in the introduction of instruments and application of remedies—mild electrolysis of the prostatic urethra and faradization with sounds being almost the only forms of direct local treatment that were well borne. A urethra in this irritable state is a perpetual source of reflex irritation for the body: it sets the whole system on fire like an irritable uterus or ovary in woman, and produces very many of the same symptoms.

It seems almost impossible to tell, from the nervous symptoms alone, whether spermatozoa will or will not be found in the urine on examination.

In the following case there were even more symptoms which suggest trouble with the prostatic urethra than in the two preceding cases; and yet, on an examination of the urine, there was found only an excess of phosphate of lime

-there was not even excess of oxalates and urates.

CASE XXX. The patient, a young man thirty years of age, had the following symptoms : stiffness of the lower limbs ; very much pain in the lumbar spine, in the back of the head and neck, feeling of pressure at the vertex ; heat in the spine ; soreness of the bottom of the feet—sometimes the heel would feel as though it were a bare nerve ; the gums were tender and white ; the pupils were dilated ; he had nervous dyspepsia ; the feet and hands at times were very cold, especially while thinking ; the power of mental application was impaired ; he was annoyed with ringing in his ears and insomnia, stomachic vertigo, and vomiting ; and he had anthropophobia, or aversion to society. A trip to Europe did no good, and while at sea his hands and face would swell and puff up.

I may say also that he was of English birth, and these symptoms came on soon after coming to this country. At one time he had married, and had lost his wife. He formed the habit of masturbating at the age of fifteen, and maintained it regularly for three years to very unusual excess, sometimes committing the act two or three times in quick succession within the space of an hour. At one period, also, he had been excessive with women. For two years had observed a decline in his powers ; in dalliance

there was prostatic discharge. He was unable to urinate when any one was looking on or waiting for his turn. This last summer the patient had for the first time a full and protracted attack of hay fever in the later or autumnal form.

With all this collection of nervous symptoms there was no evidence, on a single examination, of the existence of spermatorrhœa.

CASE XXXI. A gentleman, thirty years of age, anæmic as well as neurasthenic, reported that he had suffered for some years from fear of drunken men.* On the horse-cars and in the streets he was in fear of meeting intoxicated persons. The basis of this fear appeared to be the possibility of a row caused by a drunken man. On seeing a person drunk on the ferry-boat, he would go to the extreme end of the boat to avoid him. When a drunken man got on the horse-car where he was, he would at once step off. He dreaded, at certain times of the day, especially when he was exhausted, to go through certain

* These morbid fears seem to be capable of an infinite variety of phases. In addition to the cases that I have already reported in the paper "Morbid Fear as a Symptom of Nervous Disease" (*Hospital Gazette*, July 19th, 1879), and to which I may be allowed to refer, I have seen lately a phase of this symptom, the chief peculiarity of which was *inability to go out in the day-time*. He could go anywhere after dark, but was afraid of the light, and all the day was shut up in his house. He first came to see me in the evening. In this case, as in similar cases, there were no delusions or hallucinations. He soon recovered of this symptom.

streets, where he was especially liable to meet intoxicated persons. As I have elsewhere stated, these morbid fears are always associated with other symptoms. In this case there were symptoms of excessive itching in the axillæ and on the scrotum ; fibrillary contractions ; great coldness of the hands and feet ; mental depression was also a prominent symptom. He had much muscular vigor, and could walk for miles.

The patient was quite anæmic. As happens with many of these cases, the nerves concerned in the process of erection are abnormally sensitive ; crossing the legs and swinging them, or simply riding on the cars, quickly bringing on erections.

Once a month or so, in passing water, he experienced pleasure, as in the emission of semen. There was frequent aching of the limbs, of which such patients so often complain, and to which Erb refers in his essay on Neurasthenia.

Urinary analysis in this case found no spermatozoa, very little oxalate of lime or urates, but considerable mucus with pus-cells from the upper portion of the urethra.

Such cases show that there is no constant relation between the nervous symptoms and the ingredients of the urine, at least so far as can be determined by a single examination. The above case advertised his anæmia and neurasthenia in his countenance and bearing, and was in reality

a severe sufferer, being, indeed, worse than some cases that bore demonstrable evidence of the existence of spermatozoa in the urine.

CASE XXXII. During the past year I was consulted by a gentleman of education, scientific attainments, and excellent good sense, for true spermatorrhœa of many years' standing, brought on, as such cases usually are, by masturbation commenced in very early youth. The patient was thirty-six years of age, and had not practised the habit with any regularity for eleven years. With nearly every stool semen was discharged, as microscopic examination proved. The patient, unlike most of these cases, was not at all hypochondriacal, but considered his symptoms in a truly philosophic spirit. He was, however, like the majority of such cases, a sufferer from neurasthenia—a disease of the nervous system which I have elsewhere defined and described in detail. The special symptoms of neurasthenia, of which he complained, were insomnia, nervous dyspepsia, asthenopia, mental and physical debility. The intimate and direct dependence of the weakness of the eyes on excitation of the genital function was in this case illustrated most remarkably. He was sufficiently intimate with a young lady to sometimes embrace and dally with her ; and a number of times these dalliances led to an orgasm with ejaculation of semen. For a few hours after these ejaculations there would

be a feeling of great and most satisfactory relief ; but the next day there would always be a peculiar lassitude of the head and body, with nervous trepidation in the hypogastric region, annoying wakefulness at night, and exacerbation of the irritability of the eyes ; in the patient's own language, " Every hour of sexual excitement has reverberated on my eyes."

The question in which this patient was specially interested was whether he could get married ; whether an engagement he had formed must be broken off ; and he was desirous to learn whether there was any difference in the effect on the nervous system between ordinary, normal coitus and the ejaculation produced by simple dalliance. An able and eminent physician whom he had consulted had positively assured him that marriage would cure him. My advice was to get married, but to first tone up his nervous system by various sedative and strengthening treatment, continued for a number of months, and when he got married to be very moderate in sexual indulgence.

The patient followed half of my advice, but not the other half ; he married at once or very soon, and without taking any tonic treatment. It should be noted that one reason why he did not take the course of treatment indicated was that he was abnormally susceptible to tonics, and indeed to medicines of all kinds ; this was,

in fact, one of the symptoms of his neurasthenia.

A few weeks after marriage the patient came to my office and reported that normal sexual intercourse was even more injurious to him than the orgasms of dalliances, and that even one coitus a week he could not bear, and he politely intimated that I had given him unwise advice. In reply, I reproved him for following only part of the advice given, and suggested that he at once begin taking the sedative and tonic treatment. The internal use of ergotin, belladonna, and bromide of camphor, the systematic use of the cooling catheter and cooling rectal sound to act on the irritable prostate, were advised, while living platonically, or almost so, until he became stronger.

That this peculiar susceptibility is not confined to cases of spermatorrhœa is proved by the following case :

CASE XXXIII. A physician of middle life complained, among other symptoms of nervous exhaustion, of a special type of agoraphobia ; he could not go any distance from his office without suffering, and the farther he was from his office the greater his distress. There was headache, and also there were various head symptoms ; but the appetite was excellent and the muscular strength was equal to the average of men of his age and size. When requested to visit a patient,

he might be found at work in his garden, and yet unable to respond to the call for the one reason that he could not go any considerable distance from his home.

Under various treatment, including general faradization, counter-irritation at the nape of the neck, and internal medication, he so far improved that he could attend to his profession, although the relief is not perfect and he still takes treatment.

The point in the case of chief interest just here is, that after long and careful observation he concluded that even occasional sexual intercourse was harmful to him ; and what is of especial interest is the fact that the injurious effect was not felt until the *second day after* indulgence.

The question whether agoraphobia and allied nervous affections are not pretty directly under the influence of the genital system is suggested by cases like the above. One fact, according to my own observation, is quite clear, namely, that all maladies of this class appear almost exclusively during the period of greatest sexual activity—between the ages of twenty and fifty — very rarely before fifteen or after fifty-five or sixty. Childhood and old age have diseases enough, and diseases of debility and exhaustion ; but they do not have the special and peculiar forms or manifestations of exhaustion known as agoraphobia, spinal irritation, cerebral irritation, and

hysteria. Sick-headache—a type of this family of disease—does not usually appear before puberty, although I have known exceptions to this rule, and generally disappears between forty-five and sixty, as all students of this malady well know. It is quite possible that simple activity, or a condition of *readiness for activity* of the genital organs, without abuse in any form, may, by reflex action, excite various nervous symptoms and disorders which disappear as the genital activity declines. Cases of hysterical trance, like those of Mollie Fancher, usually (I will not says always) begin and end during the period of sexual activity.

CASE XXXIV. A man somewhat under middle life, who had been very active in his profession, was prostrated with a powerful array of nervous symptoms, in which the sexual organs shared. There was increase of desire without increase of capacity. During the night there would be persistent erections, which were followed by pain in the region of the testicle and bladder.

Although this patient had usually a good appetite, and was able at times to go out and attend to business; and when unable to leave the house or even the bed he could and did carry on important affairs by dictation; yet during all this period he could not indulge in coitus without suffering terrible prostration and palpitations. For that reason he habitually abstained.

In this case there was no evidence that sexual excess had anything to do with the nervous symptoms; but when in that exhausted state, sexual excitement seemed to be injurious. This was not a temporary but a long-standing condition. I have just been consulted by a fourth case, the details of which will be subsequently given, where normal sexual intercourse even but once a week is followed by insomnia and nervousness.

The following cases illustrate in a clinical way some of the phases of sexual neurasthenia:

Case XXXV. A young man aged 22, a mechanic, was referred to me by one of my medical friends, with a limited number of symptoms of nervous trouble plainly of a sexual origin. Whenever he attempted to have intercourse with women, there were no erections. He was at times troubled with emissions. His physical strength was very great. He was capable of working, and did work very hard in his business; was a large, heavy-built young man, and yet his strength was offset by a timidity, a fear of society which seemed almost absurd. His history of abuse had not been an especially remarkable one, and yet there was enlargement of the organ to a moderate extent. He had undoubtedly aggravated his symptoms by excessive worry, but the symptoms were real and demonstrable.

Although he had a normal desire apparently, yet partly if not mainly through fear, he could

do nothing when he made any experiments with women. He was desirous to get married within a reasonable time, and therefore consulted me.

The noteworthy fact in the case was the unusual strength of the person. Hypochondria is about the only diagnosis that could generally be made. This was a case which generally would receive the diagnosis of hypochondria. He had much the appearance of a hypochondriac, and yet he was not in the true sense hypochondriacal. But the symptoms were real, genuine, objective, easily demonstrated, and clearly flowed from the irritation of the genito-urinary system.

CASE XXXVI. A young man, 30 years of age, consulted me with the following symptoms: At one time in his life the seminal emissions had been very frequent; of late years less frequent—but four or five times a month. These emissions had resulted from stopping the habit of abuse. There was what we call a diurnal emission after stool. Sometimes he felt worse after the emissions, and sometimes not. For seven or eight years he had been annoyed with ringing in the left ear—a sound as of a distant bell or hissing sound. He had also a feeling of heaviness of the head; he had mental depression; he had fear of society, or anthropophobia. He had also sweating of the hands, pain in the back, both at the genital centre in the lumbar region and between the shoulders. The sleep was un-

certain and treacherous, but he was not especially insomnic. In sexual intercourse the emissions came too soon, with insufficient pleasure. He was troubled with what I call the weeping penis, or slight discharge (not gleet) on excitement, both before and after intercourse. Examination showed that the penis was very large and flabby, with that gristly feeling which results from excessive and long-continued self-abuse—a sort of hypertrophy of the part. There was no phimosis, and a large sound could easily be introduced.

In the above case it is interesting to note—

First: The great physical strength of the patient. He was capable of walking very long distances. The neurasthenia did not interfere with severe labor. There was no anæmia.

Secondly: He had also passed through some of the symptoms which he had suffered—they had, so to speak, worn themselves out—but sufficient remained.

Third: The enlargement of the penis by self-abuse is worthy of note, since not very much has been written upon this subject.

CASE XXXVII. A physician nearly 40 years of age, of a moderately nervous organization, whose mother all her life had suffered from general debility, and whose relatives and other branches of the family were of the nervous diathesis, gave a history of various neurasthenic symptoms. Among the symptoms were a

feeling of pressure over the eyebrows ; a feeling of heat and positive pain at times on the vertex ; pain at the back of the neck ; a burning in the feet, sweating of the hands (palmar hyperidrosis), indefinable sensations at times in the head ; attacks of indigestion and furred tongue, shortness of breath, with palpitation of the heart ; a hot feeling in the ear. In his case there was a very interesting alternation, or, as I sometimes call it, a correlation of symptoms. When the head felt best, the feet felt worst, and *vice versâ*—an alternation going on between the head and the feet. At times he was much debilitated, and could not walk two miles with ease. He found it hardest to work in the forenoon ; grew stronger as the day advanced.

The sexual history of this person was that he began the habit of abuse at the age of 15 ; that emissions came on while at school, which compelled him to break off from his studies. Two or three times a night was their greatest frequency. He could sleep generally pretty well, but if aroused out of sleep found it impossible to go to sleep again. Examination of the urine found abundance of the oxalates and urates. He was also troubled with roaring in the ears for several years. At one time there had been great mental depression, but that he had passed through. For many years he had been married and had a family. If he did not have intercourse

at least two times a week, seminal emissions occurred as often ; there was a hypochondriacal element in the case. There was no question that he had abused himself ; there was no question that this abuse had caused weakness. There was also no question that he had exaggerated this weakness by excessive worry and by timidity. But this timidity was in his case in part a result of his local debility.

The above case illustrates several propositions which I have elsewhere enforced :

First : That the sexual exhaustion with the symptoms of emission may occur in the married just as in the unmarried ; that marriage is not a cure any more than it is a cure for any other diseases.

Secondly : The alternation of the symptoms between different parts of the body. This is explained by the theories I have elsewhere advanced in regard to the *rationale* of neurasthenia, the unbalanced circulation permitting waves of blood to go from one part of the body to the other.

Third : This case illustrates a passing away of symptoms and an appearance of others. The symptoms of mental depression and of roaring in the ears he had already left behind him when he consulted me.

How certain local symptoms may be maintained and be obstinate against treatment, on account of irritation from the genital system that

would usually be unsuspected, is illustrated by the following case of a clergyman, who consulted me exclusively for weakness of the eyes, which weakness, as I became convinced, was, in a degree at least, dependent on genital weakness :

CASE XXXVIII. The patient was 33 years of age. Some years before he had been exposed to excessive heat in the tropics, which brought on neurasthenia, with symptoms of indigestion and palpitation of the heart. This neurasthenic attack left him with a neurasthenic asthenopia. In the pulpit he could read a chapter or so of the Bible and his eyes would not ache, mainly on account of the excitement and diversion of the mind from himself ; but in private his eyes would ache after a few moments' reading. At times the eyes would become red and inflamed, and also were very sensitive to light, day and night. Examination of the eyes by Dr. Mittendorf showed that there was insufficiency of both the internal recti muscles, especially of the left side. There was also slight retinal hyperæmia. The case, therefore, was one to which I usually apply the term " neurasthenic asthenopia."

I treated this case similar to other cases of that kind that I had cured, by the *interrupted* galvanic current in the inner angle of the eye with the negative pole, the positive being placed at the back of the neck or on the temples. Immediate

relief followed a single application, as it often will in a case of this kind, and I repeated the applications ; but there was not that permanence in the effect that I desired.

When he first consulted me I inquired into the condition of the genito-urinary system, as I always do in all cases of neurasthenia—not that it is the sole cause, but a very frequent cause of these troubles, or at least a complication of them. So far as I could find out from him, there was no difficulty there. He was an unmarried man, and represented that emissions were not especially annoying. When he found, however, that he did not improve as he had hoped, and as I had hoped, he told me freely that he had abused himself at times and that he had not wholly recovered from the habit, and it was clear that he himself was convinced that there was a connection between those parts and the eyes. The whole appearance of the patient suggested genital difficulty.

There was no reason to suppose in this case that the origin of the difficulty was exclusively of a genital character. There was no reason to doubt that his history as given to me was correct ; that exposure to excessive heat had been the main exciting cause. Exposure to great heat is one of the most frequent of exciting causes of neurasthenia, especially in the United States, where we have the greatest possible extremes of

heat and cold. This patient, though spending his time in the tropics, was of American birth. The sexual element was an incident and complication.

Another example of the fact on which I have insisted again and again in all my writings on this theme—that marriage is not a cure for these reproductive difficulties, and that the worst features and symptoms of genital trouble may appear in those who are happily married—is shown in the following instance:

CASE XXXIX. A physician less than 25 years of age consulted me in regard to himself. He had been married for a year, and during that year he had had sexual intercourse but three times, and in those three cases it was not of a satisfactory character. The emissions came too soon—indeed, as soon as he touched his wife usually. Prior to marriage he had but once had anything to do with a woman.

His history was: At the age of 12 or 14 he was taught the habit of masturbation, which he kept up four or five years. He stopped suddenly, and there came emissions. This is the old and very familiar history. His emissions appeared two or three times weekly, never more frequently than that. His other symptoms were fear of society, or anthropophobia, abnormal sweating of the genital parts, especially of the scrotum; the testicles were small—the left one especially so. This patient also was of great strength, capable of

taking very long rides in a carriage or on horseback, and attended to his practice without difficulty. There was no evidence of brain disturbance or of spinal-cord disturbance, as is so common in these cases.

This case illustrates the fallacy of the statement made so often in our best books on these subjects—that when emissions occur but two or three times a week they are not pathological—that is, not any signs or symptoms or results of disease, and are unworthy of consideration. This man was not in any way hypochondriacal, and his symptoms were certainly of an objective character. Under treatment, local and general, he rapidly improved, and soon reported that his wife was pregnant.

In the following case also we see that regular opportunities for normal sexual intercourse are not any cure for sexual debility, but may even be the very cause of that debility:

Case XL. A young man 25 years of age, by occupation a bookkeeper, gave me this history: His mind was sometimes much confused; he found it difficult to attend to his business. At times there was dimness of vision. His pulse was over a hundred. There were severe lumbar pains, and pains also in the groins. The gums were white. There was evidence of anæmia, and the hands sweated excessively. He had the marked neurasthenic voice that I have described.

He had anthropophobia—fear of society—in its full force, inability to look one in the face, downcastness and timidity of expression. He was not troubled with emissions. He had a mistress whom he visited regularly, and by excess with her had, I believe, brought himself into this state. He complained that the erections were but partial; that he had no longer full intercourse.

Of the above case, it is to be noted that sexual excess in a natural way can produce precisely the same symptoms as excess in an unnatural way. There is no doubt that excess with a mistress or excess with public women is more liable to bring on genital debility than excess in the married state—for this psychological reason, that when we visit a mistress, or when we visit a public woman, we go solely, or mainly at least, for the purpose of sexual gratification; our minds are upon that idea; consequently, there is a constant excitation of the sexual function. This is not the case in married life, where we live constantly with our companion; in such a relation the sexual act is incidental, and therefore less exhausting to the nerves.

SEXUAL NEURASTHENIA IN WOMEN.—The question has several times been asked me by physicians, whether sexual neurasthenia in woman resembled that in man? The answer is clear: woman is man, pathologically; all the symptoms of sexual neurasthenia, as described

by me here or elsewhere, are found in females as well as males, though they are not as frequent, perhaps, among the former. A young girl who masturbates is liable to have precisely the same symptoms that a young man will have who indulges in the same habit. I have had under my care two ladies, both of whom were masturbators, and both of whom presented symptoms which give no suggestion of any distinction in sex. Take the following cases :

CASE XLI. A lady, between 30 and 40 years of age, of a very decided nervous diathesis, presented these symptoms : dilated pupils ; frequent micturition ; vertigo, especially in reading ; neurasthenic asthenopia (this was probably one of the causes of the vertigo) ; pain in the vertex. It has been supposed that this last symptom—pain in the vertex—was peculiar to woman, but, as I have again and again stated, it is often found in man. Attacks of mental depression ; monophobia, or fear of being alone, combined with unnatural and excessive fear of death ; averted eyes ; pain in the back of the head ; ovarian tenderness, and scanty menstruation.

As will be seen, none of these symptoms, except tenderness of the ovaries and scanty menstruation, give any suggestion of the sex. The appearance of the patient was more striking than the description of the symptoms. She had the symptoms of a man, although not at all mascu-

line. With regard to causation there was no question, as it was freely admitted by the patient. In this case, also, anæmia was combined with the neurasthenia.

CASE XLII. A lady, in middle life, unmarried, began to masturbate at a very early age—much before puberty—and kept it up, off and on, for very many years. The lady was of nervous diathesis, and there had been nervous diseases of various kinds in the family. This habit, acting upon a nervous constitution, had produced the following symptoms: aversion of the eyes; a feeling of fulness in the head; morbid fears, especially monophobia—fear of being alone; melancholia, delusions; anæmia; insomnia.

There was nothing in the symptoms that suggested the sex. The same habit, acting on the same nervous diathesis in a man, would have produced all these symptoms. In this case, also, there was some trouble of the genital organs, just as in a man there would be trouble with the prostate gland, or varicocele. Pathologically, also, the prostatic urethra is a good analogue to the uterus. As it is almost impossible for any man to suffer from general neurasthenia, whatever be the cause, without developing, sooner or later, some trouble with the prostatic urethra, so, also, it seems to be almost impossible for any woman to suffer from general neurasthenia without developing, sooner or later, primarily or

secondarily, some trouble of the womb or of the ovary. In man, the trouble of the prostate may not be of an important character ; it may be far out of range of any diagnosis with the finger through the rectum ; there may be no enlargement, but simply irritation, yet severe enough to make a man an invalid. So, in woman, the difficulty of the womb or ovary may be of a slight character ; there may be no great congestion, no retroversion, no retroflexion, no displacement, no enlargement of the ovary, no positive inflammation, but still enough hyperæsthesia to be a constant source of irritation. Just as, in man, masturbation may expend its injurious effects, in some cases locally, inducing merely local disease, without any very great amount of general disease, so, in woman, masturbation may produce sometimes purely local effects, at other times both general and local.

The following case, from Erichsen, on concussion of the spine, is instructive : " A person who, by any of the accidents of civil life, meets with an injury by which one of the limbs is fractured or dislocated, necessarily sustains a very severe shock ; but it is a very rare thing indeed to find that the spinal cord or the brain has been injuriously influenced by the shock that has been impressed upon the body. It would appear as if the violence of the shock expended itself in the production of the fracture or the dislocation, and

that a jar of the more delicate nervous structure is thus avoided. I may give a familiar illustration of this from an injury to a watch by falling on the ground.

"A watchmaker once told me that if the glass was broken the works were rarely damaged; if the glass escapes unbroken, the jar of the fall will usually be found to have stopped the movements."

CASE XLIII. There had been an early habit of masturbating. The patient was of a nervous constitution. The symptoms were: ovarian irritation on the left side especially; a very considerable amount of backache; prolapsus and retroflexion of the womb; sick-headache; feeling of fulness in the head at times.

There was nothing here, except the local troubles, to suggest sex. The troubles and the symptoms, aside from the sick-headaches, were of a local character. In woman, as in man, masturbation of itself, acting on a very strong constitution, does not, even when kept up for a long time, necessarily produce any serious local or constitutional effects; it is the masturbation acting on a nervous diathesis, it is the habit *plus* a nervous constitution that gives us the product—sexual neurasthenia. Strong, phlegmatic, Irish servant-girls may begin early the habit of abusing themselves and keep it up for years, with but little apparent harm. Indeed, one quite common

habit with this class of servant-girls is to teach the children under their charge, with whom they are brought into relation, the habit of masturbation. I have known a number of cases that traced the beginning of their habit to this intimacy of the servant-girls with them. While the girls themselves were not injured, their victims, in some cases, have been life sufferers. The range for endurance of sexual excitation is wonderfully wide, there being, as it would appear, a far greater difference in the capacity of different persons for indulgence in this respect, than, perhaps, in indulgence in the appetite for food, or smoking, or drinking. For example, I was lately consulted by a man nearly sixty years of age, who, by a fall, had injured his spine so that his sexual power was impaired. On inquiry, I ascertained that he could still have intercourse three or four times a week, and when I stated that it seemed to me that in one who could do that there was not very much impairment, he said that for all his life he had been accustomed to have intercourse every night. On the other hand, I have seen very many cases to whom the sexual act is poisonous, who cannot bear intercourse or excitation in a natural way, even infrequently, who are injured by it, no matter how rarely performed, and to whom, therefore, marriage cannot be recommended, except with the understanding that the marital rights should be fulfilled

but very infrequently indeed. For this reason, the indiscriminate prescription of marriage for cases of sexual neurasthenia is, like the indiscriminate recommendation of medicine of any kind, oftentimes unwise and unscientific.

CHAPTER VII.

TREATMENT OF SEXUAL NEURASTHENIA

CHANGE OF TREATMENT OFTEN NEEDED.—WORK, SYSTEMATIC AND PERSISTENT, A REMEDIAL FORCE.—ROUTINE WORK.—MASSAGE.—TRAVEL AND CHANGE OF CLIMATE.—MARRIAGE.—GENERAL SEDATIVES AND TONICS.—SUBSTITUTES FOR BROMIDES.—GENERAL TONICS.—MENTAL THERAPEUTICS.—LOCAL TREATMENT.—LOCALIZED ELECTRIZATION BY EXTERNAL AND INTERNAL APPLICATIONS.—SOLUBLE BOUGIES, SOUNDS, AND POWDERS.—LOCAL BATH AND DOUCHES.—RECTAL TREATMENT.—CAUTERIZING AND SOOTHING INJECTIONS.—COUNTER-IRRITATION: SMALL BLISTERS, CUPPING, AND CAUTERY.—SURGICAL TREATMENT.—CIRCUMCISION.—MECHANICAL MEANS FOR PREVENTING EMISSIONS.—ASSURANCES THAT THIS DISEASE IS RELIEVABLE AND CURABLE.

THE treatment of sexual neurasthenia is of a threefold character.

First: General or constitutional treatment.

Second: Local or medical treatment.

Third: Operative or surgical treatment.

In the majority of cases, both local and general treatment are needed; they may be employed at the same time or in alternation, and failures that attend these cases are in part due to this, that

the measures used have been one-sided—the constitutional treatment to the exclusion of local treatment, and *vice versâ*. The most common error is to look solely to local treatment, medical or surgical. Different cases differ very much in regard to the necessity for local or general treatment, but the law is that the general treatment, including, of course, hygiene and mental therapeutics, should constitute about three fourths, and the local treatment about one fourth ; but this general law is only to be understood as applying to the average of a very large number of cases. There are cases not a few where the proportion is the reverse, where treatment must be only local and incidentally constitutional. There are cases—a very small minority to be sure —where only local operative treatment is needed. These cases are indeed so rare that I am not quite sure that I have ever seen one case, but I am quite willing to admit the possibility of their existence.

The general or constitutional treatment of sexual neurasthenia is not different in principle from the other constitutional treatment of the other varieties : exhaustion of brain, of the spine, of the digestive system, are benefited by carrying out the same principles.

The general rules that are to guide us in our constitutional treatment are, as indicated in my work on " Neurasthenia," as follows :

First: Not to place dependence on any one medicine or any mode of treatment. There is no specific for sexual neurasthenia. The cases are to be treated as cases rather than as diseases. In no form of disease, probably, are idosyncrasies against drugs and therapeutical procedures more common or more severe than in this disease; they overthrow all our ideas of medicine, and greatly disturb our prognosis. Remedies that are most familiar and most uniform in their action, and on which we are wont to rely, play tricks with us in our treatment of these states; the bromides may keep them awake or make them nervous; quinine and strychnine may depress them, while baths, cold and hot, and even massage and electricity, unless given with very great caution indeed, may irritate and weaken, rather than soothe and strengthen.

This fact, however, should be known and noted: that these idiosyncrasies undergo change with the progress of the patient from disease toward health; as they get stronger they can bear varieties of drugs and varieties of food that had been intolerable.

Second: Frequent change of treatment is needed. The common idea that patients can wear out a mode of medication is correct, and it accords with all we know of physics, of physiology, and of pathology; patients often need a new kind of treatment as they need a new suit of

clothes. In taking even milder medicines these cases should be under the, at least, occasional observation of their physician.

Third: Occasional suspension of all treatment. The very act of treatment itself tends to keep the minds of some patients constantly on their disease, so as to interfere with their recovery; in other words, the treatment interferes with the treatment, however judicious it may be; the constant directing of their attention to their symptoms by dosing and doing is a stronger force for keeping symptoms alive than is the action of the drugs for removing the symptoms. This is not true of all cases of this disease; it is probably not true of the majority, but it is true of some; and it is a fact to be studied in our analysis of this subject, that there are persons for whom it is well, for this reason alone, to defer or suspend, or to modify, at least, our local procedures.

Fourth: The recognition of the fact that hygiene and medicine are identical, and that those portions of medicine which have been classed under hygiene are more difficult to manage than medical or surgical procedures, partly on account of their inherent complexity, and partly because they are more exclusively in the patient's own hands.

In my studies of this subject I find patients usually willing to co-operate with the physician in

hygienic suggestions, and that the only difficulty is to find out exactly what is best and most wise for each case under all circumstances.

Under what is called hygiene come diet, work, rest, travel, marriage, change of climate. Of these it is needful to remark here only of work, rest, and marriage.

Work.—For such cases, work and the prospect of work are remedial forces ; their sufferings are genuine ; their pain is real pain ; their weakness and depression and fear are no more imaginary than the pitting of small-pox or the crepitus in a broken leg ; but, like all real physical troubles, they can be made worse by turning the mind upon them ; they can be relieved by turning the mind in some other direction. For such cases employment is mental counter-irritation, acting like blisters, dry-cupping or cautery, electricity, hot and cold baths. We are therefore justified in urging these persons that they continue in their business, whatever that business may be, provided it suits them ; and to seek occupation if they have none, with the assurance that they will be able to fulfil the duties required of them. Short vacations, or even long ones, are not inconsistent with systematic employment ; the need is to have something to look for. Giving up one's profession and business, and running off indefinitely to Europe or around the world, is usually one of the worst prescriptions that is

or can be given. Very many have I seen who, in measureless despondency, have traversed seas and mountains and continents, sacrificing therefore property and home and promise of usefulness, and seeking thereby health and finding it not. Such persons are not so much diverted by travel as undiverted ; they stand as watchdogs over their symptoms, never allowing them to get out of sight ; counting or trying to count their healthward progress from day to day, like sailors throwing the log ; they are inevitably disappointed, and return home ofttimes broken and helpless. Patients of this kind are allowed to take vacations, but for pleasure more than health. In travel and in all treatment, the seeking of health, though systematic and persistent, should be incidental, not the main issue—secondary rather than primary ; here, if not elsewhere, he who would save life must lose it ; an over-earnest and fiery desire to get well keeps us from getting well.

To all forms of neurasthenia and allied states these general principles apply, the only exceptions being cases of exhaustion so profound that they need absolute rest in bed.

Routine Work.—Labor that is familiar, that has become rooted in the system by a life devotion, costs, as a rule, comparatively slight cerebral force ; the movements required for it pass over well-worn grooves with very slight friction, and

are therefore less exhausting incomparably than new or unusual labor of any sort; many, therefore, who can do their regular work, whatever that may be, easily, have no reserve of force left for any extra exertion in lines they are not accustomed to, where friction would be excessive and exhaustion correspondingly great. My general advice, therefore, to these persons is to maintain themselves in the special calling, whatever that may be, that they have been accustomed to, if possible avoiding excessive strain in it, and not to go outside of the routine of their lives except in the way of relaxation and pleasure. Many who can thus do routine work successfully and well are pointed out as models of health, and the story of their nervous bankruptcy is discredited by friends and doctors even; whereas, since it is well understood that by the principles of physics a very slight amount of force is needed to do routine work, it will be seen that the capacity to do this work is no necessary sign of strength, but may coexist with very profound weakness; the test comes on some long march, some great strain, mental or physical, outside the circle of their ordinary life, which every healthy person should be able to meet, but which these people are not able to meet, and by which they are often put back in their progress toward health for months or years. Many of these persons go on well and pleasantly and satisfactorily in their

daily occupations, which to others might appear exacting and severe ; but, suddenly called upon to evolve a large amount of force in an unexpected crisis, they are flat on their backs—all the good effects of treatment and management are wiped away, and they are left prostrate and discouraged.

Massage.—As an addition to our other means of treatment, massage is to be commended, for those especially who are so troubled with spinal weakness that they cannot take much physical exercise, or for those whose callings are so sedentary that they get little chance for out-door labor. I look upon massage, however, as a minor rather than a major means of treatment in these cases—as incident and attendant to more powerful procedures, like Turkish and Russian baths for those who can bear them. It is a very pleasant luxury and does some good, rarely or never any harm. I have never seen any very important results from this alone, in profound cases of sexual neurasthenia. As a means of relief of weariness, as a luxury after the languor of baths, this procedure of massage in different ways has been used for thousands of years, not only in the Sandwich Islands, but in India and Japan. It seems to be a method of treatment which savage nations fall into independently, by a natural evolution.

Travel.—One needs a good constitution to

travel with pleasure or with profit. Persons who are very sick, debilitated by chronic disease of many years' standing, are usually made feebler, very rarely made better; very often, indeed, much discouraged by a long and toilsome trip, either by land or sea. One, indeed, needs to be well to travel well and with pleasure or advantage to health. If a person take a trip to Europe or in any direction when just beginning to be sick, when simply, it may be, tired by over-confinement, he may be entirely restored from his temporary fatigue; but for a chronic neurasthenic, travel treatment is a very unsatisfactory treatment; it thoroughly discourages, oftentimes, in its effects, because so much is expected from it by those who have not judiciously prescribed it. Young men whose means are small, who cannot afford the time or the money for expensive journeys, take these journeys in the hope that they will get cured thereby, and they come back with all their symptoms exaggerated and hopeless for the future. I sometimes say to these cases: "After you get better you can travel, but you are not strong enough at present for such exertion as is required for travelling; when you do travel, travel for fun, for amusement, not for health." The man who can get health by travel is not very sick; for if he be very sick, travel is likely to make him worse. Prolonged residence in the tropics or in foreign lands might help very

many of these cases, but there are very few cases in which this is practicable or advisable, and none in which it is necessary.

Marriage. — Marriage, like travel, is recommended for these cases by wholesale, without consideration for the claims and wants of idiosyncrasies. Marriage and non-marriage are really but two out of a large number of factors that enter into the causation and treatment of these maladies. As bad cases of sexual neurasthenia as I have ever seen have been in those who are healthily married, while in other cases marriage has been the direct exciting cause. Quite an important percentage of my cases have been married for years, and in age range between twenty and seventy. In their relation to marriage, sexual neurasthenia may be divided into the following classes :

First : Those who are positively benefited—perhaps cured—by marriage, whether resorted to as an incident to treatment, or as the main and only dependence.

That there are such cases –that there are many such—cannot be questioned ; but they are not the majority ; probably, rather, they are the minority of the neurasthenic patients that are specially affected in or through the sexual organs. Every physician has seen instances illustrating this, but the inference that marriage is a specific for sexual neurasthenia is as far out-

side of warrant in experience, as the inference that travel is a specific for the same cases because now and then one has been profited by travel.

Second: Those who are positively injured by marriage, or, indeed, by sexual indulgence, even rarely.

With the increase of modern sensitiveness the list of this order of neurasthenics is growing longer and longer. Such temperaments are not only disappointed in the remedial power of coitus, they are directly and severely harmed by it; and if married they must live platonically if they would live in health. With these persons intercourse, frequent or rare, has no apparent effect that is salutary, and very many effects, apparently, that are annoying. These bad effects sometimes follow at once, sometimes after an interval of one or two days; in some cases they are purely local, in other cases general, reverberating through the whole body.

MEDICAL TREATMENT. — *Local Sedatives.* — Among the remedies that have a more or less sedative effect on the genito-urinary tract, and which may therefore be employed in connection with the constitutional treatment, are the following: Hydrastis, epigea repens, triticum repens, stigmata of maize, rhus aromaticus, eucalyptus, digitalis and digitalin, alkalies, cantharides in very minute doses, belladonna, atropia, ergot and

ergotine, lupuline, camphor, bromide of camphor, gelsemium, cimicifuga.

It is not to be understood that these drugs, when they enter the system, intelligently avoid every other part of the body and rush directly to the prostate gland. It is probable that these remedies have affected the whole body more or less, but their effect can be demonstrated in some cases more readily and satisfactory on the genito-urinary tract, when it is in a condition of inflammation, congestion, irritation, and exhaustion.

The differential action of large and small doses is very noticeable in the use of cantharides and belladonna, large doses of these remedies being, as all know, very irritating at the neck of the bladder, while small doses are soothing.

General Sedatives.—Among the remedies which have a general sedative effect in neurasthenia, but no special sedative effect on the genito-urinary tract, are: Physostigma, the bromides of sodium, ammonium, lithium, potassium, calcium, and hydrobromic acid, glonoin, scutellaria, cypripedin, cannabis indica, lactucarium, hyoscyamus and hyoscyamin, conium, convallaria.

Substitutes for Bromides.—It is quite important in many cases to find some sedative remedy or combination of remedies that have the good effect of the bromides, in a more or less degree, without their injurious effects. The above list contains good substitutes.

There are two classes of patients for whom it is not well to prescribe bromides. First, those who are kept awake instead of being put to sleep by them, or with whom in some way they do not agree. The number of those who cannot get some benefit of a temporary character from bromides is small. Second, those who have already taken the bromides too long—who have been thereby weakened and impoverished. The bromides, like all the other great remedies, are abused on account of their very value; they do so much that they are ordered to do everything. In this respect the history of the bromides is like that of mercury, counter-irritation, opium, and the like.

General Tonics.—To depend on general tonics, even the very best, for the cure or important relief of sexual neurasthenia, is to make disappointment sure. If iron and quinine, salicine, phosphoric acid and muriatic acid, and strychnine, arsenic, coca, quassia, calumbo, phosphorus in all its forms, the salts of zinc and silver could cure this trouble, then all cases would be quickly cured; for almost all use some of these remedies, or all of them, often in large doses and for a long time; sometimes with a degree of benefit up to a certain point, sometimes with clear evidence of injury.

There is, indeed, no specific, or any approach to a specific, for sexual neurasthenia any more

than for the other varieties ; it is not by any one remedy or by any prescription, simple or compound, that we obtain the result. All the above-named tonics are good ; some of them are most excellent, but none of them can be trusted as even a chief means of cure ; these tonics are to be used oftentimes in connection with sedatives or in alternation with them ; they are in some cases to be withdrawn absolutely, in other cases the dose must be reduced very greatly ; there are persons who are made worse at once by the use of these tonics, at least when given in the average dosage.

In most cases of neurasthenia and in all varieties the stomach suffers first or last, and this fact must be considered in giving medicine. I usually give both tonics and sedatives well diluted, and begin with small doses. Where large doses are given, it is with the understanding that they are to be taken a short time, with intervals of rest for the stomach and nerves, and at the outset, at least, one must be ready always to give up even a choice and favorite prescription when it does not agree, or seem to agree ; doubts are often best solved by withdrawal and then returning again, carefully watching the effects.

I have faith in the objective power of drugs apart from the action of mind on body—the expectation of the patient. I believe we can relieve and cure, or aid in the cure of disease by medical

substances introduced into the system, just as we can induce disease in the same way, even when the patient does not know he has taken anything, or just what he has taken, or just what effects to look for. This creed is inconsistent in no way with the admission and declaration for which I have always contended, and the truth of which I have demonstrated by special experiments, that mental therapeutics is the most important of all therapeutics, and that mental force is the strongest single force that nature gives us in our conflicts with bodily disease.

I have faith, justified by observation, in very large doses of some remedies for some patients, in some conditions, for a short time and for an effect that small doses, though repeated often, cannot give ; and have also faith, justified by observation, that often-repeated, very small doses of some remedies, for some patients in some conditions for a short time or for a long time, have an effect quite different, radically different, from the same remedies in large doses, and it is not inconsistent at all that in the same patient both large and small doses should be given.

Mental Therapeutics.—There is no form of neurasthenia and no form of disease, nervous or inflammatory, where mental therapeutics, under the vague and elastic and unfortunate phrase "moral treatment," is so often tossed off as a prescription as in sexual neurasthenia.

Mental therapeutics, the turning of the patient's own mental force on his body for the purpose of relieving or curing disease, is important in this disease as in all other diseases, but there is no proof that it is of more or greater value in sexual neurasthenia than in other varieties of neurasthenia or in other forms of functional nervous disease. Even in organic disease of the brain or of the spinal cord, mental therapeutics is a powerful and an almost incredible means of temporary relief.

The mind of the patient in sexual neurasthenia can be therapeutically utilized both positively and negatively.

In the first place, we can assure such patients that their disease is relievable and curable. This assurance, which is based on the history of cases, is itself a curative force co-operating pleasantly and powerfully with whatever else we may do.

The history of these cases gives us a right to predict a bright future—which they especially fear will be impossible—provided they break up any evil habits and conform in a reasonable way to the local and hygienic treatment required. Some cases of a milder sort recover spontaneously under time and hygiene. In bringing, therefore, the element of hope to bear in these cases we are simply making use of experience; and the larger one's experience, the longer we keep sufferers of this disease under observation,

the more hopeful on the whole we become, and in acquainting our patients with this fact we are both giving them information and helping to cure them. The prophecy is an aid to its own fulfilment. There are, probably, few forms of disease where symptoms are so distressing and so long standing that are so sure of relief as these cases, under right management, even in the most hopeless forms of the disease. Where there is or appears to be a wreck of all the faculties, and the whole man seems to be going to pieces, help can be secured in time by patient and sensible use of therapeutical measures—a relief that is both agreeable and tends to become more permanent with age.

Second, drawing off the mind of the patient from his disease by mental or physical work.

There are cases of neurasthenia in both men and women that need entire freedom from physical or mental toil, but the victims of this special form of neurasthenia do better, as a rule, to be employed in something that at once sustains their ambition, engages their thoughts, and gives them visible encouragement that they are not wholly disabled, nor likely to be. Better to stop on the safe side of fatigue; but occasional excessive exertion is preferable to sustained, moody, and hopeless inaction, since one can more quickly rally from a single indiscretion than from a steady course of evil hygiene.

Muscular exercise is better than mental; it draws off more thoroughly from the sexual centres; it is sedative, where sometimes intellectual exertion is exciting. For man or for woman muscular exercise of some kind, or of many kinds, is, indeed, the best known relief for the irritating and morbid sexual desire that so often attends sexual debility.

Superior to any and in many cases to *all* other forms of general tonic treatment in neurasthenic conditions are the methods known as general faradization,* and central galvanization, as described by Dr. Rockwell and myself in our work on Medical and Surgical Electricity.

The most thorough form of general faradiza-

* The German literature of general faradization is now extensive, and is increasing. Among the more recent writings on this special mode of using electricity are the following: Erb's "Handbuch der Electrotherapie;" Stein's "Allgemeine Electrization des Menschlichen Körpers" (including general faradization, central galvanization, the electric bath, and franklinization); Möbius: "Ueber Allgemeine Faradization," *Berl. Klin. Wochen;* Fischer: "Ueber Allgemeine Faradization," *Arch. Centr. Bl. Nervenheilkunde;* Maurfisch: "Ueber Allgemeine Faradization." Schweiz, corr., B. XI., p. 221, 1881; Vater: "Review of Erb," in *Allgemeiner Med. Zeitung.* Möbius has just published a *résumé*, wonderfully thorough, even from a German point of view, of the literature of this and other points in electrotherapeutics gleaned from all the languages, under the title "Ueber Neuere Electro-therapeutische Arbeiten." Some of the above references are taken from the monograph of Möbius, which has just reached me. Möbius also gives a *résumé* of the recent and important literature of static electricity.

tion demands that the whole surface of the body, from the crown of the head to the soles of the feet, should be brought under the influence of the faradic current. Used in this way, the current acts as a powerful constitutional tonic to the nervous system, permanently improving the sleep, appetite, and digestive capacity, equalizing the circulation, developing muscular tissue, and frequently producing, through its influence over nutrition, rapid increase in the weight of the body. Like other powerful tonics, general faradization when given in an overdose or too strongly, or in any way injudiciously managed without regard to varying degrees of susceptibility of different parts of the body, may be followed by disagreeable and even harmful effects. It is entirely possible, however, to avoid all these unpleasant results by making the first applications tentative. As some patients are exceedingly sensitive to the treatment as well as to other external impressions, the first applications should be mild ; each case is a law unto itself, and should therefore be studied by itself. In their ultimate effects the analogy between both general faradization and central galvanization and all other tonic influences, such as physical exercise, sunlight, cold bathing, as well as those purely medicinal, is very marked ; the disposition and capacity for labor of brain and muscle are increased. This is the chief end of all tonic treat-

ment, and for which such aid is usually sought, and this result does not, as a rule, follow until sleep, appetite, and digestion are improved. Both forms of dynamic electricity have a powerfully modifying effect upon the nutritive condition, although the galvanic current is preferable when it is desired to influence parts that are deeply seated.

Hand in hand with general faradization goes central galvanization in the treatment of the various forms of neurasthenia. As the object of general faradization is to bring the whole peripheral nervous system under the influence of the faradic current, so the aim of central galvanization is to bring the entire central nervous system—brain, sympathetic and spinal cord—under the influence of the galvanic current. As in a vast number of other forms of functional disorders, the pathology of neurasthenic disease, including the sexual variety, is not definitely localized in any one portion of the central or peripheral nervous system. This is true of hysteria, chorea, as well as many varieties of neuralgia also, and in the treatment of all these varied nervous symptoms the best success must come through the general treatment of the brain, sympathetic and spinal cord, rather than through any exclusively localized efforts.

Local Treatment.—The methods of local treatment of sexual neurasthenia are quite

numerous. Many which I have tried and discarded, because they either failed or are less useful than other methods, I shall not mention here.

Those which I use and commend are the following :

Localized Electrization by External and Internal Applications.—Electricity may be applied to the male genital organs in various ways, and by both currents—galvanic and faradic.

First : One electrode in the rectum and the other in the urethra, both insulated nearly to their tips. In this method *very mild* currents must be used, since the tips of the electrodes come very near together, the tissues are very moist, and there is but slight resistance to the current. This is good treatment for gleet and prostatorrhœa.

Second : One insulated electrode in the rectum and the other externally at the perineum, or between the penis and scrotum, or over the pubis, and on the inner side of the thighs. In this method very strong currents can be used.

Third : One pole connected with an uninsulated sound in the urethra, and the other on the thighs or on the spine. Strong currents can be borne in this method also.

In this method the mechanical effect of the sound is combined with the special effect of the electricity. I have devised a clamp for connecting the electricity with the sounds.

Fourth: Purely external applications, one electrode pressed firmly on the scrotum, the other on the spine or the back of the neck, or on the inner sides of the thighs, the nerves of which are intimately connected with the genital apparatus.

Fifth: One electrode at the perineum, the other up and down the spine.

In the above method of application, both currents may be used. I use the faradic more than the galvanic. For the gleety blennorrhœal discharge that often accompanies sexual neurasthenia, I prefer the insulated electrode and the galvanic current.

Sixth: Drawing off sparks on the spine and the genital region by statical electricity (franklinization).

The use of statical electricity (franklinization) is necessarily felt all over the body, and is really a form of general electrization; but it is especially felt on or near where sparks are drawn, and by this method very powerful local impressions may be made. In these applications the patient sits on an insulated stool, and there are a variety of electrodes that I employ in the applications. I make frequent use of the electric wind in these as in other forms of nervous diseases.

Comparing franklinization with galvanization and faradization, I should say that the average

results of faradization are preferable ; but there are individuals who are specially benefited or seem to be specially benefited by franklinization, and *vice versâ*. I therefore make considerable use of it as an alternate to general faradization. It is certain that most sensitive persons can be franklinized without discomfort and without fear, and without any unpleasant after-effects.

In using any form of electricity, we have to guard against too long, too strong, and too frequent applications ; but we are not to be alarmed if a drop of blood should appear after an internal application, and we are always to abandon or suspend or modify the applications when they seem to disagree.

In that large class of cases where there is marked diminution of sexual power while the general health and strength remains unimpaired, these local applications of electricity are often followed by the most beneficial results.

One cannot be too cautious, however, in beginning these applications in many such cases, for strong and prolonged treatment may result in harm rather than good. Only the other day a gentleman, aged 38 and in robust health, consulted me for a certain degree of impotence, which had existed for several years. Some months ago, on the eve of sailing for Europe, injudicious local applications at a Turkish bath establishment resulted most disastrously. What

little vigor remained to him seemed to be dissipated, and it was some months before he recovered from this abuse of an agent which, in professional hands, may be of the greatest value. Dr. Rockwell informs me of a case somewhat similar; the electric-bath operation taking place, singularly enough, at the same Turkish-bath establishment. Such ignorant and injudicious handling of so powerful an agent cannot be too strongly condemned. In those cases of simple diminution of the erectile power, independent, of course, of disease of the nerve-centres, faradization of the ischio-cavernosus and bulbo-cavernosus muscles may prove of great service.

In that other class of cases, where there are changes in the seminal secretion, not only in quantity but quality, the use of electricity is undoubtedly indicated. The galvanic current is, however, to be used in preference to the faradic, for the former more than the latter is capable of influencing the various secretory as well as excretory processes of the body.

Soluble Bougies and Cupped Sound and Powders.—These familiar devices have never fulfilled my hopes; and as the other plans described here do better, I have fallen into the habit of making less use than formerly of even such a good remedy as iodoform in the shape of soluble bougies, or in an ointment for the cupped sound. The more

common remedies, such as sulphate of zinc, seem to do but little except for some intercurrent attack of urethritis.

The powder of iodoform can be introduced into the urethra by a tube with a sliding wire and bulbous extremity.

Sound.—The history of many of these cases is a history of disappointment in the use of sounds. Treatment that is only local, however varied, most usually fails ; but exclusive dependence on the introduction of sounds is, of all measures, disappointing for all cases of general sexual neurasthenia—that is, cases in which the brain and spine and digestive system have become involved, as well as the genital organs. That the sounds, by their mechanical influence, are a help in some cases, mainly of a local character, even when there is no stricture, has been shown long ago, and by many observers ; but they do very little that is desired or promised of them. Now and then a good and strong effect is noticed after large sounds have been used ; but this is often temporary, or is appreciated only in some one symptom, as impotence ; whereas large numbers of persons use the steel and flexible sounds faithfully without profit, and sometimes to considerable harm.

Very sensitive urethras cannot bear steel sounds, even when introduced cautiously and kept in but a short time ; increase of the sen-

sitiveness, and sometimes discharge, are the results. Not only for the patient, but for the physician, the flexible sounds are less irritating.

All these criticisms apply mainly to the treatment of those cases where there is no stricture.

Local Baths and Douches.—From cold sitz-baths I see little good in the class of cases to which these papers are devoted. The experiments are made on an extensive scale ; almost every one tries them.

Hot sitz-baths, taken at night, injure less and help more ; but some are so sensitive as to be weakened by them, while in other instances the effects are negative or doubtful.

From douches to the spine and back of the neck, with hot water or cold water, or an alternation of hot and cold, there is more satisfaction than from bathing. These douches, however, should be managed with prudence, the chief point being to avoid using them too long at a time. Some are made chilly by a very short douche of cold water ; a minute is a long time when a stream of cold water is falling from a height on the back ; a fraction of a minute is all that many nervous patients can bear.

Horse-hair mittens used thoroughly and daily all over the body are a good substitute for baths and douches, and may well follow all water applications.

Rectal Treatment.—The prostate gland, when in

an irritable condition, can be affected through the rectum, in some cases with less disturbance than through the urethra. Injections of ergot, of aqua bismuthi, of hamamelis, of hot water, and bromide of sodium, are sometimes most useful, not only when piles exist, but when there is heaviness, aching, or oppression in the rectum after walking.

Suppositories of many kinds I have used—iodoform, valerianate of zinc, ergotine, belladonna, and so forth, but the injections seem to do better, save in those cases, quite rare, where the rectal pain is severe enough to require morphine.

The irritable rectum requires, in fact, substantially the same treatment as the irritable urethra.

Cauterizing and Soothing Injections.—The injection of a small quantity of a solution of nitrate of silver is good treatment for the prostate urethra when used cautiously and occasionally ; but it is not a specific or sole dependence for these cases in any sense. I should never think of relying upon it in any case, and there are no cases that require its frequent use. I see no harm, but much benefit, from these injections in my practice ; but I do not depend on them only, and in many cases get along without them. The painful urination and desire for urination and discharge of blood that follow these injections are not serious symptoms. In a day or two they

pass away ; but if they should be serious they could be relieved by opium and warm sitz-baths.

Lallemand's porte-caustique is not well borne by the modern nervous constitution, certainly not by the American constitution, but a strong solution of nitrate of silver, even much stronger than one half a drachm, in *small quantities,* can be tolerated by almost every one.

Besides nitrate of silver I use injections of hot water and the bromide of sodium in the urethra. The hot water is of great value for all mucous membranes, from the nasal passages to the penis and the urethra ; it is good for nasal catarrh, or gastric catarrh, or intestinal catarrh—for piles, and for urethral catarrh. The difficulties in applying hot water to the urethra are numerous ; first of all the double catheter, with holes near the end, is likely to cause irritation of a mechanical kind by the contact of the edges with the mucous membranes ; then the catheter itself with a stream of hot water passing through it soon becomes painfully hot. I had a double catheter of this kind constructed, and soon gave up its use on account of these difficulties, and I now use the flexible catheter above described. With this catheter one can inject a small quantity of hot water into the deep urethra. The quantity of the injections is small, but can at any time be repeated. The bromide of sodium injections I

find very excellent for soothing and sedative effects. I use a solution of one part to fifteen of water. For the frequent condition of hypersensitiveness of the urethra, the bromide of sodium injections are very excellent and admirable ; they can be used frequently, once a day or oftener.

Counter-irritation : Small Blisters, Cupping, and Cautery. — There are various ways for using counter-irritation effectively : the use of very small blisters to the spine, as described in my work on "Neurasthenia ;" dry-cupping on a large scale, wet-cupping, and the actual cautery.

Counter-irritation to the perineum by means of the nitrate of silver or iodine has disappointed me. If severe, it annoys ; if mild, it does little good. The judicious and careful use of small blisters is preferred, in the manner elsewhere described, to the perineum and to the under portion of the penis, and is rewarded by a relief of the symptoms of prostatic irritation that cannot always be obtained by other means. The philosophy of this method of treatment in prostatic irritation is the same as in local irritation of other parts, as in spinal irritation, cerebral irritation, nervous dyspepsia, neurasthenic eye, and so forth, all of which conditions are analogous in pathology, in history, in philosophy, to irritation of the prostate, and very often associated with it. On this subject Mr. Milton, of London, writes very intelligently.

The success that follows this mode of local counter-irritation depends largely on the details, on the judgment of the physician, and the good sense of the patient. To do permanent good, the treatment must be kept up, off and on, for some time, and in order that it may be kept up for a long time it should be conducted so as not to severely annoy or interfere in any way with daily duties.

Dry-cupping seems to be useless unless it be carried out with more emphasis and thoroughness than is the custom; but when practised on a large scale, and maintained systematically, like electrization or hydro-therapeutics, it is of much value. It should be applied not only to the spine, but to the thighs and perineum. One of my patients has lately constructed an apparatus for dry-cupping, which seems to be superior to anything I have seen. If it fulfils its promises it will in time be described and illustrated.

The cautery of the paquelin or the galvano-cautery I often use just before the application of the small blisters, placing the blister-plaster directly over the parts cauterized.

SURGICAL TREATMENT.—Sexual neurasthenia occurs in those who have and those who have not phimosis or redundant foreskin, in Jews as well as Gentiles, in those who have and in those who have not stricture or narrow meatus. In regard to the relation of these conditions to ner-

vous disease, these three propositions are demonstrable :

First : Persons who have very strong, old-fashioned constitutions are rarely or never injured in the nervous system, locally or generally, in any important degree, at least by phimosis or redundant foreskin, or by stricture or narrow meatus.

Second : Persons who are only moderately sensitive may in time suffer from these conditions, locally chiefly, and in the different degrees of impotence and spermatorrhœa. With this class of persons, however, years may elapse before even these local effects are noticed.

Third : Persons who are very sensitive nervously, and especially Americans, living in our American climate, are liable to develop all or many of the symptoms of sexual neurasthenia under the exciting influence of any one of these conditions. The phimosis or the stricture alone could not have excited the nervous disorder, except when co-operating with a temperament previously made sensitive by exhausting climate,* work, worry, tobacco, alcohol, traumatism, or excesses.

* In my "American Nervousness," chap. iii., the climate of America as a cause of neurasthenia is considered in detail, with especial reference to conditions of the air and extremes of heat and cold. Very recently an Englishman, Mattieu Williams, has written in confirmation of these views. He speaks of the "desiccated Englishman" and of "Americanitis"—an equivalent to

The consideration of these propositions will help to answer the question, whether, in any case, surgery is to be added to medicine.

Out of 192 of my cases of nervous diseases, including neurasthenia in all its varieties, epilepsy, etc., there were 60 cases of phimosis or redundant foreskin, with or without smegma. Of these 60 cases, 16 were circumcised, but in no case was the operation the only dependence, but was used in connection with medical treatment, local and general.

From the time of Lallemand circumcision has been used as a means of combating certain affections of the nervous system.

The recent literature of the subject is extensive and familiar, and need not be cited here. I will give briefly the results of my own experience, and the general inferences to be drawn from this experience up to date.

1st. The diseases for which circumcision may be needed are in general, neurasthenia (especially

nervousness. In the same line were the results of Mr. Herbert Spencer, on American overwork. The work of Möbius, of Leipsic, on "Neurosität," may also be consulted.

Some of the later writers, including Mr. Spencer, err in assuming that the trouble is only American. The whole civilized world is suffering in this way; the American, mainly for climatic reasons, being only about a quarter of a century in advance of Europe. At the present time there is a larger literature of this subject in Germany than in America.

sexual exhaustion), epilepsy, and certain paralyses of children.

The most rapid and brilliant reported results have been secured in some cases of epilepsy and paralysis in children. I have not myself seen these immediate results from circumcision in these diseases, but have no doubt that some, at least, of the reported cases are exactly as presented by physicians who report them. These may have been, however, mistakes of diagnosis, and possibly some of the cases have not been watched long enough after operation.

2d. In the majority of my cases of nervous disease for which circumcision has been resorted to with apparent success, the good effects have not been rapid or immediate, but slow and gradual, a process of weeks and months rather than hours or days.

In these cases the operation seemed to remove an obstruction or element of irritation, and so to prepare the way for general and local treatment of a medical character.

3d. It follows that in such cases the operation of circumcision is a preparation and adjuvant to other local and general treatment, and not the main or only dependence.

Even in those cases where the operation has been demonstrably of service, and has given great satisfaction to the patient, I have not depended on it exclusively.

In some cases the operation has been used at the outset of a course of treatment; in other cases after other treatment has failed or not met fully with our hopes.

4th. The conditions of the foreskin that seem to call for or suggest the operation are, elongation and redundance, with balanitis and accumulation of smegma. The accumulations of smegma are in some cases enormous, and are sometimes as hard as boards.

All these conditions may exist where there is no actual phimosis or strangulation of the glans penis.

The foreskin may be loose enough to be drawn back off the gland, and yet be in nervous constitutions a constant irritation. What irritates one person may be entirely harmless to another. Much depends on the accompanying conditions.

The above four propositions apply also to operations for stricture of the urethra and narrow meatus.

It is no discredit to the established principle at the basis of these operations to say that those who expect immediate and complete relief of nervous symptoms from simple circumcision or operations for stricture will usually be disappointed.

In combating these long-standing nervous cases, surgery and medicine need to work as allies and not singly. In the study of this sub-

ject I have had the co-operation of the best surgical skill, and have been much aided thereby.

The same propositions apply, I am persuaded, to diseases of the sexual apparatus in women associated with nervous diseases. I see in this respect no difference in the sexes.

Those who expect, for example, such nervous symptoms in man or woman, as morbid fears, fear of society, of solitude, of travelling, of places, of disease, or morbid impulses to kill one's self or others, mental depression, wakefulness, headache, impaired memory, deficient mental control, palpitation, emissions, cramps, numbness, neuralgia, dysentery, spinal irritation and pain, to be instantly and permanently cured by operations on the genital organs alone, will be disappointed, however much the operation may be needed, unless medicine, and hygiene, and time coöperate with the surgical treatment. This is not, however, inconsistent with the fact that in a limited number of cases only the operation is necessary.

I have had treated twelve cases of sexual neurasthenia by circumcision, or by stretching. The operations have been performed by Dr. Francis D. Buck and Dr. M. Josiah Roberts. In one case an immense quantity of *hardened smegma*—the accumulation of years—was removed. Some of these cases are very remarkable indeed, as illustrating on the one hand the complexity and

variety of symptoms from which neurasthenics suffer; and, secondly, as illustrating the effects that are obtained by the combination of medical and surgical treatment, patiently carried out and varied from time to time, according to the needs of each case. In none of these cases did any striking or brilliant result follow at once after the operation, but all have since been improving.

In one case—that of a gentleman over thirty years of age—there was congenital phimosis to such an extent that it was possible to urinate only in a very small stream. Any number of neurasthenic symptoms accompanied this state; among them, unusual flushing of the face from very slight cause or no cause at all, exhaustion, lumbar pain, etc. The relief following the operation was very great, but it was not even moderately satisfactory until medical treatment of various kinds had been used. This patient was very susceptible to remedies, and required to be treated very cautiously and carefully. He has now improved, and is in good working condition. The operation did not cure him, but it removed the obstacle in the way of relief.

A second case was very remarkable in every respect. The amount of redundancy of the prepuce was not very great, and there was not much phimosis, but it was sufficient to justify an operation. The neurasthenic symptoms accompany-

ing the condition were attacks of profound mental depression, urging on to suicide; lumbar pain, fear of society (anthropophobia), very rapid pulse, salivation, sweating hands, very extraordinary urethral hyperæsthesia, as well as irritable prostate. There were a number of interesting facts connected with this case. One was, he had been very fond of smoking, and had indulged in the habit until he became neurasthenic, when he was compelled to give it up. His fear of society was so great that on going into company he would break out into profuse perspiration, so that even his underclothing would be saturated. He suffered also from excessive urination. He was also a sufferer from congestion of the eyes. One interesting fact in connection with his fear of society was, that it did not trouble him much in the day, but only after supper. He suffered from involuntary emissions, and the symptoms connected with these were of such a character that he knew beforehand, by his feelings, when they were going to appear. The improvement has not yet resulted in perfect cure, but it has been sufficient to justify what was done. In several other cases the results of these operations, supplemented by various medical treatment, have been far more complete and satisfactory, bringing about a practical cure, and enabling the sufferer to return to his abandoned occupation.

Mechanical Means for Preventing Emissions.—The mechanical devices that have been employed for preventing emissions, such as electrical apparatuses that cause a bell to sound as the penis becomes erect, and rings which pierce the flesh as soon as erection appears, and the like, are not to be encouraged. Even when these appliances succeed in their special purpose—that is, in waking up the patient before full emission occurs—even when they always succeed they do not accomplish the great purpose of curing the man of his disease, but, on the other hand, cause very great annoyance indeed, and at the end of every night of experimenting he finds himself still sick—perhaps worse than before. A recommendation of all these things comes from a false philosophy of the disease, or rather from no philosophy at all—mistaking twigs for branches, effects for causes, details for generals, minutiæ for principles. Simply a stopping of emissions is not curing a man who is suffering from emissions, for the reason that the overflow of semen is a result as well as cause, coming from an irritated prostatic urethra usually, and this irritation of the urethra will persist, even if the semen is not allowed to flow. It may, perhaps, in some instances become worse if there is no outlet for the seminal fluid. What is needed is a plan of treatment that shall correct this condition of the prostate, and thus the nervous and exhausted

condition of the whole nervous system, of which the prostate is a part, and with which it is intimately connected, so that whether emissions occur or do not occur the patient shall not suffer. A neurasthenic person, whether he have emissions or do not have emissions, is not well; a thoroughly strong person, a non-neurasthenic, is well whether he have emissions or whether he have them not; he is not injured by their occasional appearance or by their non-appearance; a thoroughly strong man can be strong whether he do or do not indulge in sexual intercourse.

From all that has gone before it will appear that the therapeutics of these diseases is a team with many horses, all of which need, oftentimes, to be harnessed and to pull together if the patient is to ever attain relief.

In these cases the mind is acted upon, whatever treatment we use. This cannot be avoided, nor is it desirable to avoid it; but the mental therapeutics is not necessarily the only or even the chief element in the cure, any more than it is in any other disease. Indeed, judging from my own experience and experiments, it would seem that *almost all forms of functional nervous disease are more amenable to mental influence than these cases of sexual exhaustion.* No class of patients that consult us are in greater need of definite and well-directed medical treatment than these, and

no class of diseases of the nervous system respond better to such measures. These cases are mostly relievable and curable, but to accomplish relief and cure we need positive, objective, and, in some instances, powerful treatment.

CHAPTER VIII.

THE DIET OF THE NERVOUS.

THE THEORY OF EVOLUTION AS APPLIED TO DIET.—FOOD BEST FOR NERVOUS INVALIDS.—RELATIVE VALUE OF MEATS, EGGS, MILK, FISH, FRUITS AND VEGETABLES.—CARNIVOROUS ANIMALS AS FOOD FOR MAN.—DIET OF SAVAGES AND SEMI-SAVAGES.—THE LAW OF EVOLUTION GOVERNS THE DIET OF BRAIN-WORKERS MORE THAN THAT OF THE UNINTELLECTUAL.—THE CHARACTER OF A PEOPLE DEPENDS UPON THEIR FOOD.—ANTISCORBUTIC REMEDIES.—THE RELATION OF STARCHES AND SUGAR TO DIGESTIVE FERMENTATION.

THE theory of evolution is that the universe is a growth in a series, from the simple to the complex.

Devolution or destruction is a reverse process, but is itself a part of the general process of evolution.

A tree of the field, in its growth and decay, is a type of the universe, from the formation of a planet to the thrill of a thought.

The theory of evolution is aided thus in reorganizing biology in general; it must also aid us in reorganizing medicine in all its departments

—the study of sanity and of insanity, of epilepsy, of neurasthenia, and all the neuroses and all nervous diseases, functional and organic.

Evolution must be the basis also for reorganizing our knowledge of the action of remedies, going beneath and around all such special claims as antipathy, allopathy, and homœopathy, and the like, and explaining the law of the different action of remedies in different doses and on different temperaments.

The science of diet—the philosophy of food—is certainly needed, if anything is needed. Food is medicine ; for the cure of curable diseases of a chronic nature, we can do more by food without any other medicine than by all other medicines without food.

The cause and cure of most chronic diseases are found on every table : not only dyspepsia and biliousness and constipation—conditions that are directly referred to diet—but diseases apparently connected but remotely or indirectly with the stomach, as gout, rheumatism, diabetes, and nervousness in all its forms, may be brought on or relieved by what we eat three times a day.

These mottoes—" The first requisite to success is to be a good animal," and " Tell me what thou eatest and I will tell thee what thou art"—express correctly, in a popular form, the importance of food.

If we have no philosophy of food, it is cer-

tainly desirable and necessary to obtain one, if possible, and not to trust to mere trial or empiricism. If it shall be found—as I trust to be able to show—that empiricism, or the trials of races through the ages in sickness and in health, are in harmony with the theory of evolution as applied to food, it is none the less desirable to ascertain what the general law of diet is, so that we shall have a rational guide, and not be forced to trust entirely to instinct.

By the theory of evolution these three propositions with regard to food should be true :

First : Living beings feed on that which is below them in the scale of development.

Second : The best food for man is that which is just below him or nearest to him in the scale of development.

Third : Food is difficult of assimilation for man in proportion to its distance below man in the scale of development.

As evolution is growth in series from the simple toward the complex, it follows that the higher must feed on the lower, and that any grade of growth most easily assimilates with that which is one grade or but few grades beneath it.

By the phrase development in the scale of evolution, I refer not to the mind, but to the body ; to the mechanical constitution of those portions of the body that are used as food ;

mainly to the muscular substance which constitutes the chief portion of animals.

The following two special propositions are also verifiable :

1*st. The earth feeds on gases ; fruits and cereals feed on the earth ; the lower animals feed on fruits and cereals and on other animals ; man, therefore, should feed mainly on the lower animals, with a small proportion of fruits and cereals.*

2*d. In proportion as man grows sensitive through civilization or through disease, he should diminish the quantity of cereals and fruits, which are far below him on the scale of evolution, and increase the quantity of animal food, which is nearly related to him in the scale of evolution, and therefore more easily assimilated.*

The best food for nervous invalids, according to the doctrines of evolution, would therefore be as follows :

Beef,	Milk,
Mutton and lamb,	Fish,
Fowl,	Butter,
Eggs,	Wheaten bread.

Milk is animal food in its most easily assimilated form, and as it is the best food for children, so it is the best food for adults when their stomachs become sensitive like those of children ; and when nothing else can be borne by the stomach that ought to be borne.

The preparation and selection of the above diet are of practical importance.

Lean meat is preferable to fat, for fat is a relatively lower form of organization. Fat is, indeed, oftentimes a process of degeneration. Oysters that are raw or broiled are more easily digested than cooked oysters; fish should be boiled or broiled, and eggs should be boiled but little.

The above diet list contains, according to the theory of evolution, the best food for men or women, young or old, brain-workers or muscle-workers, at any season of the year and in all climates. The conspicuous feature of the list is what it does not contain. There are in it, as will be seen, no fruits, no vegetables, no cereals except wheat, no fats except butter; and in conditions of great delicacy, butter, even bread, must be denied. Sugar, and starches which are converted into sugar; fruits which contain sugar; beers, ales, and most of the wines are noteworthy for not being in this list.

For many if not for most persons, the best stimulants are coffee, tea, brandy, and claret; but these are to be classed as negative rather than positive food.

Two or three questions here arise to the mind of an inquirer in connection with the above list and the propositions that precede it.

First: Why are not carnivorous animals more

eaten?—they certainly are near to man in the scale of evolution.

The reply is twofold. First, their flesh is generally of a coarser and harder texture than that of herbivorous animals. Carnivorous animals are obliged to work so hard for a living in hunting down other animals, which are oftentimes but very little inferior to them in strength, that their muscles must become hard and firm as compared with herbivorous animals, who find their food growing beneath their feet ready to be eaten without resistance and without exertion. The direct effect of eating so much flesh is to make their flesh harder and more indigestible than the flesh of herbivorous animals. Hence it is, therefore, that men prefer not to eat lions, tigers, hyenas, and birds of prey, like eagles, hawks, and vultures, or fish of prey, like the dog-fish, shark, etc. Secondly, in emergencies, men can and do eat carnivorous animals and birds, although they prefer, when they can have their choice, herbivorous ones.

Mr. Wallace says that "carnivorous fish are not less delicate eating than herbivorous ones."

Du Chaillu gives a description of a royal feast given to him by an African king, which consisted of boiled elephant, which had been cooking for one day to make it tender; boiled crocodile, wild boar, and a roasted monkey, which wonderfully resembled a roasted baby.

Secondly: Why is not man good food for man; and why should not cannibals be healthy and strong?

The answer is that man *is* good food for man; and cannibals *are* the strongest and healthiest of savages.

The Fanus, a tribe of Africa who eat the bodies of those who have died of sickness, and who steal and eat bodies that have been long dead, are said to be the finest set of negroes in the interior of Africa.

Cannibals, though energetic and vigorous, are not necessarily more ferocious than any other flesh-eating savages. For example, the inhabitants of the South Sea islands, who used to eat human beings, are not, apparently, any more cruel than the North American Indians, who live on wild game almost exclusively. Cannibals eat human beings, not because they hate them, but because they love their flesh; they eat them for the same reason that we eat the lower animals, and do not, therefore, feel any more unkindly toward them than we feel toward our cows, whose tender steaks we so much enjoy. Although monkeys are in some respects more nearly related to man intellectually than other animals, yet they are not, according to the theory of evolution, our direct ancestors, but rather the divergence from a far-away common stock; and their flesh, though very good food for man to eat, would

not necessarily be any better than that of cows, sheep, or horses ; chemically, probably, it would not differ materially from other animal flesh found on our tables.

Thirdly : Why is it that savages and semi-savages are able to live on forms of food which, according to the theory of evolution, must be far below them in the scale of development ?

The answer is twofold. First, because they are savages, and are themselves but little removed from the common animal stock from which they are derived. They are much nearer to the forms of life from which they feed than are the highly civilized brain-workers, and can therefore subsist on forms of life which would be most poisonous to us. Secondly, savages who feed on poor food are poor savages, and intellectually far inferior to the beef-eaters of any race.

It would appear that almost everything living in the world is used, has been used, or is liable to be used as food. The natives of Surinam and Dominica eat the toad and make soup of it for the sick ; the natives of Jamaica eat the iguana ; in Ceylon bees are eaten ; in Australia the moth ; among the Hottentots caterpillars are a luxury, as sugar-plums are with us ; spiders are eaten, centipedes, locusts, armadillos, porcupines, alligators, snakes, lizards, and lice ; many live on bats, and many more on mice. Baker speaks of

an Arab sheik who all his life had daily consumed two pounds of melted butter, and "at eighty years of age was as upright as a dart, and a perfect Hercules." Some kinds of food once very popular with the ancients are now but rarely used, because our refined tastes would not enjoy them—such as the lamprey, the sturgeon, the porpoise, the dolphin, the bustard, and the flamingo. The African eats roots, garlic, the larvæ of ants and grasshoppers; the poorer classes of the Chinese resort to earthworms, rotten eggs, unhatched ducks, and watermelon-seeds in vast numbers, as well as mice and fish. The stay of life in central and eastern Arabia is the date; hence the injunction of Mahomet, "Honor the date, for she is thy mother;" and the Arab of the Sahara will drink oil as we drink coffee. Says Richardson: "An Arab will live three months on barley-meal paste dipped in olive oil." In Chili, balls of grease are sold in the markets, and almost every dish is cooked in oil. Savages all over the world may be abstinent for days and then gorge themselves with whatever they can find, without harm; whereas the highly organized, sensitive, impressional brain-worker of our day can eat but little at a time, must eat often, and must restrict himself mostly to those substances that are near to him in the scale of development, as found in the above list.

Diseases without number—though not nervous diseases, since civilization is the one primary cause of nervous diseases—are brought on by the bad diet above described of the barbarian and the partially enlightened; and, other conditions being the same or nearly the same, the character of a people depends upon their food. The rice-eating Hindoo and Chinese and the potato-eating Irish peasant are kept in subjection by the well-fed English. Of the various causes that contributed to the defeat of Napoleon at Waterloo, one of the chief was that for the first time he was brought face to face with the nation of beef-eaters, who stood still until they were killed. And in Egypt the late campaign was a short one partly because good food was arrayed against poor food: bread and beef against rice and lentils. The peasantry of France, Italy, and Spain, who take their half-bottle of wine with rice and soup, must always give way, in battle or labor, to the properly fed Englishman or American.

Great brain-workers everywhere, among all races and climes, prefer the best of animal food to vegetables or fruits; and they find by experience or in philosophizing, that as they grow sensitive through confinement or toil they must use less and less of vegetables and fruits, and restrict themselves more and more closely to those forms of food that are nearer to themselves in

the scale of development. They find, as nervous invalids always find when they follow their own instincts, that as they grow nervous they lose their power of digesting fruits, nuts, vegetables, and sweets of every form, and must fall back on the simple reserve of animal food.

The following generalization is harmonious with evolution and with experience : *If man must restrict himself to one kind of food, that should be fresh meat of some kind ; and on this alone it is possible to maintain not only health but high-working capacity both for brain-workers and muscle-workers.*

There is another important and suggestive generalization by Lieutenant Schwatka—namely, that it is the principle of vitality in food that prevents scurvy, which disease, he affirms, is caused by the want of *fresh* food, the exposure and dampness and bad air being merely predisposing and incidental causes.

He states that the principle of vitality is retained more or less in desiccating, curing, and preserving food ; that the lower forms of food, as fruits and grains, retain the principle of vitality longer than animal food, and therefore are better than salted or preserved meats ; that boiling and burning and violent chemical processes, by destroying vitality, do not make as good food as drying by atmospheric pressure ; that freezing kills the anti-scurvy properties of lime, lemon, and other fresh juices ; that the juices obtained

by simply squeezing and carefully bottling, or meats dried in the sun and preserved in their own tallow, like the pemmican of the prairie Indian, retain their natural properties best. He sums up his views in the following sentence :

" The only real anti-scorbutic remedies which I am disposed to acknowledge are *fresh* foods, and by fresh food I mean *anything* recently deprived of life, or having the powers of preservation of the living principle to an eminent degree ; and when I say anything I mean every living organism not actually poisonous, even including such as *leaves*, *weeds*, *insects*, and reptiles."

This paper of Lieutenant Schwatka did not appear until this essay was commenced. It has no reference to evolution ; and the facts it contains, some of which, in the way in which they are represented, are important, as illustrated by the philosophy of evolution and its application to food.

Does this principle apply to nervous patients ? Are the nervous pursuing the right path when they avoid fruits, vegetables, starches, and sugars, and depend chiefly on fresh meats and fish, milk and eggs, with a comparatively small quantity of cereals and vegetables ? This question is answered affirmatively by the increasing experience of nervous sufferers everywhere. The majority of my nervous patients who have been suf-

fering for any considerable time tell me that they found by experience, without any theorizing, even against their theory oftentimes, that they can digest fresh beef better almost than anything else, and that vegetables and fruits disagree with them ; and when I hand them a diet list based on the above principle they often say, " I am living in that way already." In the worst cases, where even fresh, tender beef cannot be digested, milk, a milder form of animal food, when given frequently and little at a time, can be well borne.

Not only neurasthenics, whose digestion is sensitive and who feel at once in the stomach any departure from the law, but epileptics, and even the insane in the relievable stages of insanity, are better for conforming to the above plan of diet. This is true also in diseases not distinctly nervous, as gout and rheumatism.

This generalization is also inevitable from this application of evolution to diet—namely : *That as the human constitution increases in sensitiveness through civilization or acquires sensitiveness through disease, the diet should correspond or be restricted mainly to that form of food which is nearest to man in development, the lower and distant forms being dropped off or diminished.*

If this proposition be not historically true, then our whole philosophy of evolution as applied to diet must fall to the ground and must perish. I claim that this proposition is true in history, as it

should be in philosophy ; that induction informs deduction ; that facts and theory are here in harmony ; that in all civilized countries the diet of the civilized classes has changed and is still changing, advancing as we advance, so as to become, in a degree, a measure of civilization. The diet of the brain-working classes of our days is as different from the diet of the corresponding classes in the last century as the civilization of our time differs from the civilization of that time ; and this difference consists mainly in the substitution of fresh meats and light bread for salted meats, pork, fruits, sweets, starches, and vegetables. The description and history of the food of civilization among the higher classes is a history and description of the progress of civilization. If we know what a nation eats, we know what a nation is or may become. The diet of our fathers but one or two generations ago was made up of pork, usually salted, and salted fish, black or brown bread, vegetables in large number, cakes, and pastry. In distant country places, among purely muscle-working classes, this diet can now be studied in its full characteristics ; but if our in-door living, brain-exhausted professional or business men should attempt to live by this diet the result would be disease and death. Pork has long been driven from our tables ; salted beef is less used, and also buckwheat cakes, and pies have already become unfashionable

among those who know how to live. If by chance a very sensitive nature is born in a farming community he adopts the farmer's diet ; and the farmers' wives and daughters often suffer for the father and sons. The Americans need to be more careful of their diet than the Europeans, for the reason that they are more sensitive than the Europeans.

From different points of the compass the profession have for years been converging toward this central fact—that starches and sugars are injurious in certain diseases, as diabetes, gout, and rheumatism. Quite recently Dr. Alexander Hadden, of New York, has published important observations on "The Treatment of Subacute and Chronic Gout," in which he shows, in opposition to the authority of Cullen, Garrod and others, that a meat diet is a means of curing rheumatic and gout trouble. His patients were allowed only such vegetables as contained neither starch nor sugar. Dr. Hadden further asserts that carnivorous animals and birds do not suffer from gout or gout enlargements—forming his conclusion from a study of many animals and birds in captivity and in the state of nature—whereas horses and sheep and cows are liable to suffer from enlargements of the joints quite frequently.

Dr. Hadden asks the question, "Whether some fermentation may not take place in the

alimentary canal of such animals, birds, and human beings as subsist largely upon a diet composed mainly of amylaceous and saccharine principles, or both, similar to the fermentation which takes place in the manufacture of malt liquors or wines, etc. ?"

This question was answered affirmatively long ago by Dr. J. H. Salisbury, who made a large number of important experiments on animals and on human beings, the details of which, I believe, are soon to be published. He hired men to allow themselves to be fed on starchy substances exclusively, with the result of producing disease in a comparatively short time. His studies were made from the chemical point of view, and are of very great interest.

Forms of fish or animal food that are very repulsive at first soon become palatable and satisfactory.

Lieutenant Frederick Schwatka, U. S. Navy,* says that in the arctic regions the flesh of the walrus, the polar bear, and of the seal, in spite of their peculiar flavors, are nutritious, and by good cookery can be made fairly agreeable ; and he further states that fresh food of this kind is an antidote to scurvy ; that indeed in the use of this kind lies mainly the solution of support in arctic travel. He further says that his party was

* *New York Medical Record*, p. 340, 1882.

nearly a year without bread of any kind, and without fresh bread for two years. Lieutenant Schwatka, shortly after his return from his arctic expedition, informed me, in conversation on the subject of diet in cold regions, *that his party of four men lived on nothing but fresh meat, often raw, during a period of nine months, and were in perfect health, although surrounded by all other conditions favorable to the development of scurvy.*

This strong and important statement he repeats in the above-quoted article, and further quotes Payer, of the Austro-Hungarian expedition, as saying: "We spent the latter half of August in seal-hunting, for it was only by the use of fresh meat that we were able to contend with, if not prevent cases of scurvy."

Lieutenant Schwatka further affirms that it is possible for white men to live for years in the arctic regions without scurvy, without disease, provided they live on fresh meat. In my little work on "Eating and Drinking," published in 1871, I described the eating and drinking customs of the leading races and tribes of the world, of all the continents and of all climates, and demonstrated that in the tropics as well as in the poles, in extreme heat as well as in extreme cold, meat was the best food for man. This demonstration was from the experience of the world, and with only indirect reference to the application of evolution to diet as presented in this

essay. This is true of all races, and of brain-workers as well as of muscle-workers.

It is best for a student, if he can, to go to the sources of medical knowledge and get it fresh from the discoverers of truth. A conversation with Columbus would be far preferable to long voyages with our best modern Atlantic commanders.

The following formulæ are given as simply suggestive of the general therapeutic course to be pursued (aside from the use of electricity, etc.) in Neurasthenic cases. Each one of them, and many others that might be mentioned, may, in certain phases of the neurasthenic state, be clearly indicated, and prove of service; but the proper selection and adaptation of these means to individual cases, is a matter that calls for insight and judgment.

A. D. ROCKWELL, M. D.

1. ℞ Zinci bromidi
" Valerianat.
" Oxidi (1.00) āā gr. xv.
Rosæ Conserv. q. s.
M. Ft. pil. no. xx.
S. One pill an hour after breakfast and dinner, and before retiring.

2. ℞ Zinci phosphidi
Ext. nucis vomicæ (0.33) āā gr. v.
M. Ft. pil. no. xx.
S. One night and morning.

3. ℞ Strychniæ
Phosphori (0.015) āā gr. ¼
Ext. cannabis indicæ (0.12) gr. ji.
Ferri carb. (1.33) gr. xx
M. Ft. pil. no. xxv.
S. One pill three times a day before meals.

4. ℞ Fld. ext. epegea repens
" " eucalyptus
" " hydrastis
" " jaborandi (62.20) āā ℥ ji.
M. S. Dose, a tea spoonful two or three times daily.
Valuable in renal and bladder complications.

5. ℞ Potass. bromidi (62.20) ℥ ji.
Ammon. bromidi (3.88) ʒ j.
Potass. bicarb. (0.51) gs. viii.
Tinc. columbæ (31.10) ℥ j.
Aqua (124.40) ℥ jv.

M. S. A teaspoonful to a tablespoonful night and morning.

In those occasional cases of excessive sexual irritability the above prescription is often of exceptional value.

6. ℞ Ferri phosphatis precipit. (4.25) ʒ j. grs. jv.
Quiniæ (2.12) grs. xxxii.
Strychniæ (0.064) gr. j.
Acidi phosphorici diluti q. s.
Sacchari pulveris q. s.
Aquæ ad. (124.40) f ℥ jv.
Olei aurantii (0.33) gtt. v.

The iron, quinia and strychnia should be carefully dissolved in the dilute phosphoric acid, the water added, and sugar sufficient to make a syrup by agitation or gentle heat. The syrup contains in each fluid drachm 2 grains of the iron salt, 1 of quinia, and $\frac{1}{32}$ of a grain of strychnia.

7. ℞ Ferri pyrophosphatis
Zinci bromidi (3.88) āā ʒ j.
Digitalis tinc. (20.00) ʒ v.
Fld. ext. ergotæ (124.40) ℥ jv.

M. S. A teaspoonful one to three times a day.

Associated with the varied symptoms of sexual neurasthenia we occasionally meet with excessive and annoying palpitation of the heart, but of a purely functional character. In such cases this combination has been found to do excellent service.

8. ℞ Auri et sodii chloridum
Dose (0.0012 to 0.0042) $\frac{1}{50}$ to $\frac{1}{15}$ of a grain.

9. ℞ Syr. aurantii cortex (79.70) ʒ jiss.
Tinc. cinnamon (11.40) ʒ jii.
" nucis vom. (3.88) ʒ j.
Fld. ext. macrotin (31.10) ℥ j.
Aqua (124.40) ℥ jv.

M. S. Tablespoonful three times a day.

This is a valuable prescription for the relief of the fugitive and annoying pseudo neuralgic pains so frequently complained of.

10. ℞ Tinc. cantharides (31.10) ℥ j.
Tinc. ferri sesqui chloridi
Tinc. nucis vom. (15.60) āā ℥ ss.

M. S. Forty drops to be taken in water two or three times a day.

In the impotence of advanced years and in some cases where it results from self abuse or sexual excesses, the above formula carefully used may prove serviceable even when used alone. Conjoined with the proper form of electricity and judiciously applied its effects are greatly enhanced. Some cases of seminal emissions yield to it also.

11. ℞ Fld. ext. scutellariae (46.60) ℥ jss.
Tinc. hyoscyami (20.80) ʒ vi.
Aqua (124.40) ℥ iv.
Potass. bromidi (15 60) ℥ ss.

M. S. A tablespoonful before retiring.

A most admirable prescription for the insomnia and restlessness characteristic of certain neurasthenic types.

12. ℞ Acidum nitro muriat. dilut. (7.60) ʒ ji.
Aqua (248.80) ℥ viii.

M. S. A tablespoonful before meals.

13. ℞ Acidum sulp. aromat. (31.10) ℥ j.

S. Ten to thirty drops in a wine glass of water before meals.

These mineral acids are of service either alone or in combination with vegetable bitters—especially, as is frequently the case, when the urine abounds in oxalates and urates.

14. ℞ Aloin (0.51) gr. viii.
Ferri sulp. exsic. (1.54) gr. xxiv.
Ext. nucis vom. (0.51) gr. viii.
" belladonnæ (0.51) gr. viii.
M. Ft. pil. no. sixteen.

S. One or two pills daily.

The above combination and the one immediately following are excellent in the constipation occurring in sexual neurasthenia.

15. ℞ Podophyllin
Ext. nucis vom.
" belladonnæ āā (0.38) gr. vi.
" hyoscyami (1.54) gr. xxiv.
M. Ft. pil. no. xxjv.

S. One or two pills at bed-time.

16. ℞ Euonymin (1.33) gr. xx.
Hydrastis
Aloe soc.
Hyoscyami
Podophyllin 0.64 āā gr. x.
M. Ft. pil. no. twenty.

S. One or two pills at bed-time.

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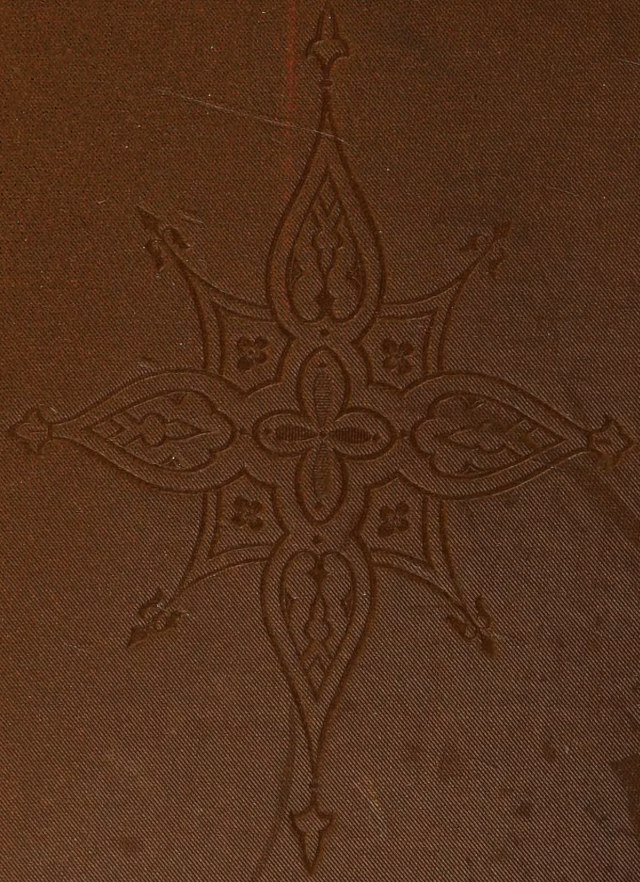
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